



NAMOS paylane media

Outdoor Payment Terminal

We would like to know your opinion on this publication.
Please send us a copy of this page if you have any constructive criticism.

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

With kind regards,

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Your opinion:

NAMOS paylane media (Manual Edition 05/13)

Order No: **01750244056B**

Published by
Wincor Nixdorf International GmbH
D-33094 Paderborn

Order No: **01750244056B**



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Outdoor Payment Terminal

Hardware Installation

Edition May 2013

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Manufacturer's Certification



The device complies with the requirements of the directive 2004/108/EC with regard to 'Electromagnetic compatibility" and 2006/95/EC "Low Voltage Directive".

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

Warranty

Wincor Nixdorf (WN) generally guarantees a warranty engagement for 12 months beginning with the date of delivery. This warranty engagement covers all those 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 of the stipulation look into your contract.

All parts of the product which are subject to wear and tear are not included in the warranty engagement.

Please order spare parts at the Wincor Nixdorf customer service.

Tel.: 0180 1 WINCOR (Vanity Number)

Tel.: 0180 1 1 99 2 99

E-Mail: WNCCC.contact@wincor-nixdorf.com

Introduction

The NAMOS paylane media **Outdoor Payment Terminal (OPT)** has been developed for a total flexibility in use at petrol stations.

The NAMOS paylane media must be installed outside the explosive risk zones in a petrol station environment. The system is available as a single or double sided, stand alone or pump retrofitted unit and as a payment terminal for car wash. The operational area of the NAMOS paylane media is outside. Therefore, the housing is protected against rain (IP44), coldness (heating) and moisture.

The NAMOS paylane media has been provided with the symbol for “Tested Safety”. Make sure to meet the stipulations of the norm “EN 13617-1” when installing the NAMOS paylane media!

The NAMOS paylane media can be mounted (with an adapter) to all current petrol pumps. The NAMOS paylane media housing has an ergonomically design and is vandal-proof. Service and logistics personnel have direct access for changing spare parts. The housing is lockable to prevent unauthorized access. The system is qualified for a temperature range of -20°C to $+45^{\circ}\text{C}$ in the shadow. It must not be operated in altitudes above 2000 m (6562 ft AMSL).

The NAMOS paylane media is used in many countries and Wincor Nixdorf will deliver country-specific configurations, thus meeting the requirements of our customers. The different configurations are described in this manual.

Scope of Delivery

The basic delivery unit contains:

- the NAMOS paylane media appliance
- keys for the NAMOS paylane media
- keys for the BEETLE /M
- 4 installation screws with spacers
- Hardware Installation Guide
- Windows software license (XP embedded)
- Important notes

Report Missing or Damaged Items

Should you notice

- any transport damages or
- discrepancies between package contents and delivery ticket
or
- functional defects,

please inform your contracting parties or the branch office of Wincor Nixdorf immediately.

Pallet Delivery

The appliance will be delivered on a special pallet.



Remove the four plastic straps and the adhesive tape.
Open the cardboard box and remove the top PE.



Remove the software package, bolts, spacer and keys.



Lift up the cardboard box.
Remove the paper roll for the printer from the PE block.



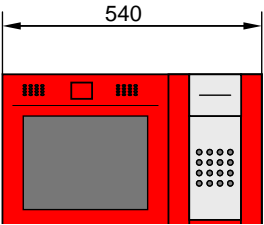
Remove the PE bag and the desiccants.



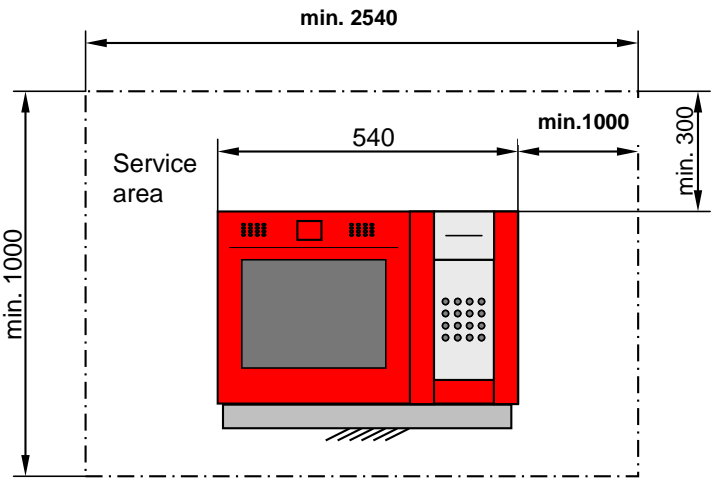
Lift up the appliance and place it at the service area.

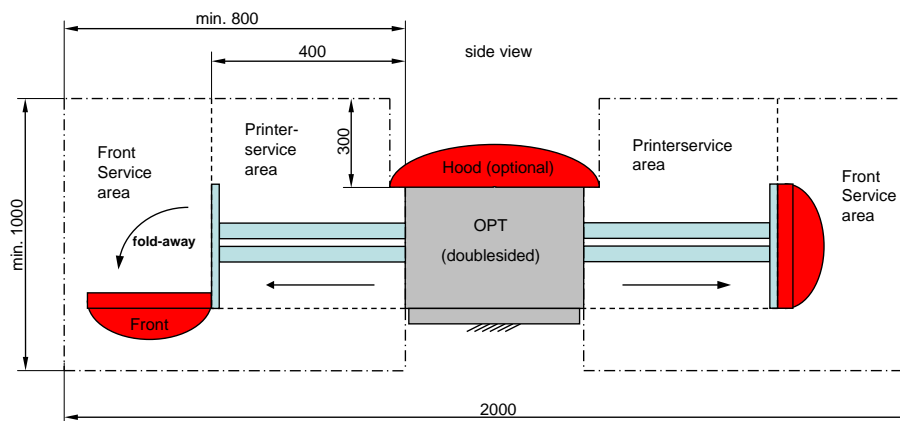
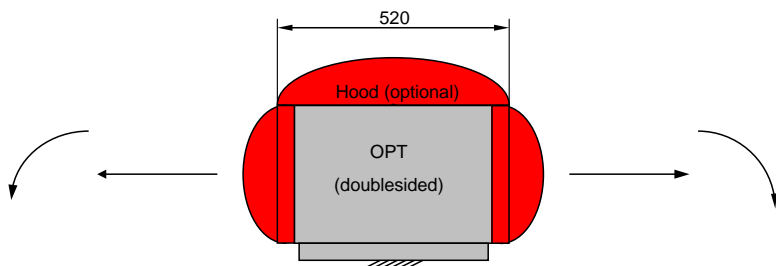
Service Area

Please provide enough space before installing the appliance regarding the dimensions of the service area (see pictures below, metric measurements).



front view





Basic Installation

Tools

What you need at least:

- different cross recess screw drivers
- different Torx screw drivers.
- adequate tools for mounting and integrating the appliance into it's environment.

Variants

Note for the installation that NAMOS paylane media is delivered either as single sided or double sided system.

Opening the Front Cover



Push the key cover upwards and insert the key vertically. Push the key in and turn it clockwise to unlock.

Key cover

Now turn the handle to the right side.



Pull out the front cover with the aid of the handle.



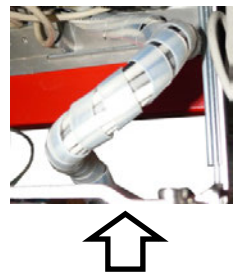
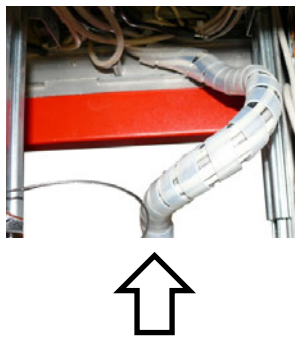
Closing the Front Cover

When closing the front cover make sure that no cable in the inner housing sticks out and may cause pressure to the front cover.

All cables of the BEETLE system must lay plane (pictured).



The main cable loom must guide into the inner housing as shown in the pictures below.



If any other cable is an obstacle when closing the front cover use an additional cable binder to solve the problem.

Procedure

Screw the screws of the accessory kit into the four boreholes that were used for the shipping restraints before.

Open the front cover and remove the printer unit to reduce the weight of the appliance during installation. Removing the printer will also provide more space to remove the back cover of a single sided OPT. Thus the accessibility for connecting cables will be enhanced.

Do not tilt an opened appliance at the service area.

If you have to tilt the appliance for installation purpose, use a protective layer (such as rugs) to avoid a damage of the lacquered front side.



The installation of the NAMOS paylane media has to comply fully with the specific petrol station legislation requirements described in the section “Guidelines” and “Legislation requirements”.

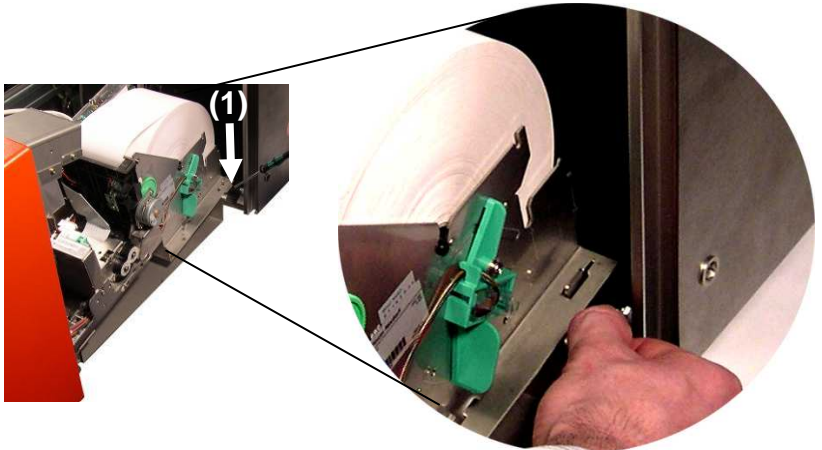
Removing the Printer

- Open the OPT and pull out the front cover (see page 8).
- Disconnect the power supply cable from the printer (upper cable, green).
- Disconnect the data cable from the printer (lower cable)

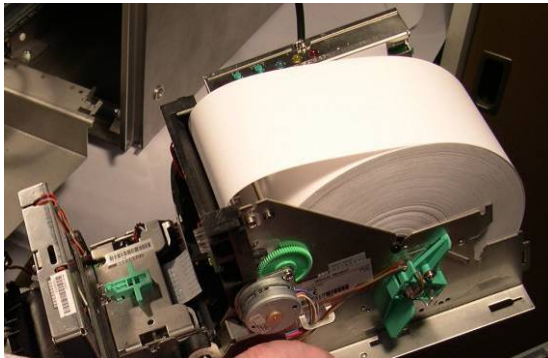
Power supply
cable
Data cable



- Press the locking of the printer downwards (1).



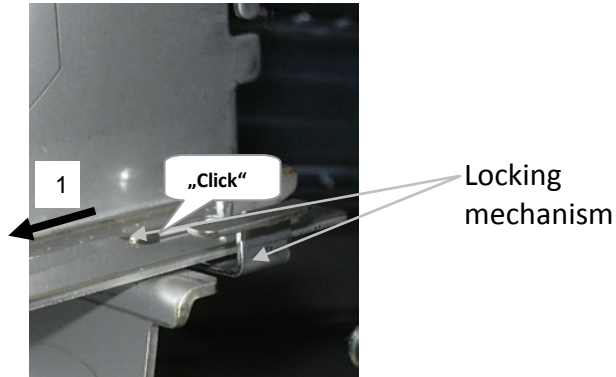
- Push the printer backwards out of the hanging.



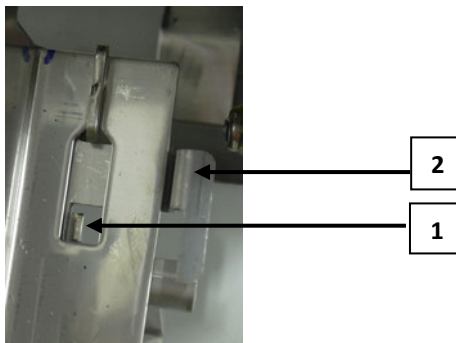
Now you can lift off the complete printer unit.

Installing the Printer

When installing the printer, pay attention to put it into the hanging and push the printer forward as far as possible (1). The locking mechanism (security pin and locking grip) is properly engaged when it **audibly clicks** in.



To avoid a possible paper jam at the ticket dispenser examine the proper position of the security pin (1) as shown in the picture (top view).



The locking grip (2) will be in the upper position again.



Even if a paper jam occurs check the proper insertion of the printer.

Removing the Rear Cover (Single Sided Version)

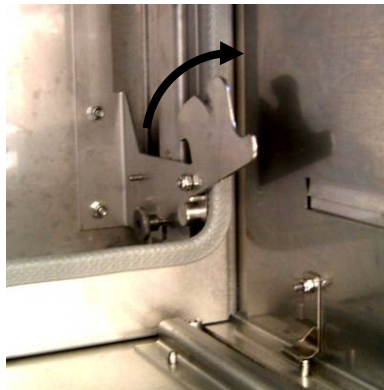
Remove the back cover to enhance the accessibility for connecting cables.

- Open the front cover.
- Remove the printer.
- Loosen the two knurled screws on the left and right hand rear side inside the appliance.

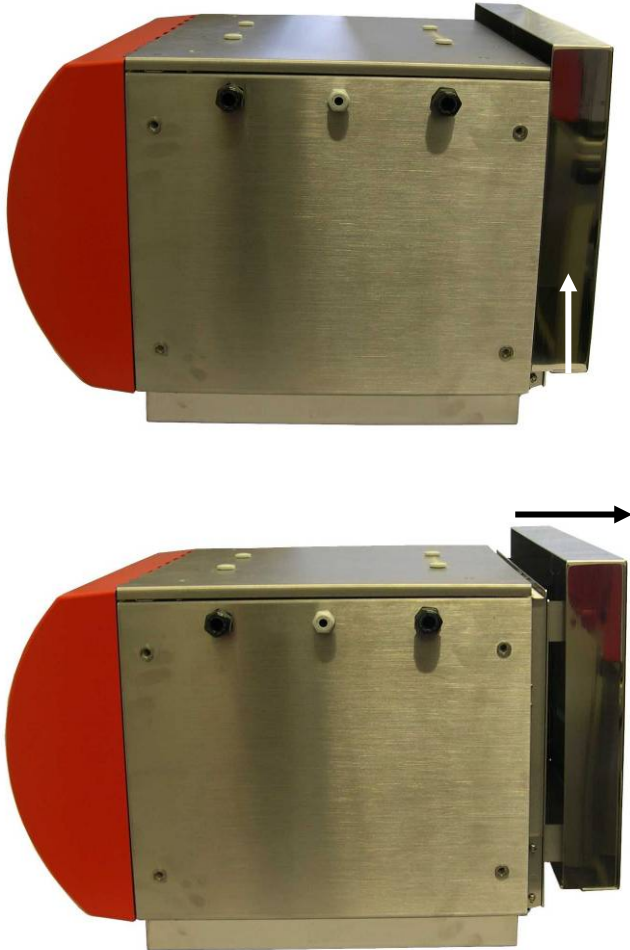


Knurled screw

- Turn both latches on the left and right hand side to release the rear cover.



- Lift the rear cover approx. 1.5 cm to the top and remove it backwards.



Reassemble the rear cover by reversing the previous instructions.

Guidelines



The installation of the NAMOS paylane media has to comply fully with the specific petrol station legislation requirements described in this section and in the section “Legislation requirements”.

Installation of the NAMOS paylane media has to be made in accordance with the Petrol pump environment.

The NAMOS paylane media has strictly to be installed in non explosive areas.

Suction of cooling air from EX areas is prohibited.

Injection of cooled air into an EX area is also prohibited.

The NAMOS paylane media is provided with a top plate which covers those slots for the air suction next to zone 2. Depending on the installation the top plate can be turned so that the coverage is on the right or left hand side.



The base plate of the NAMOS paylane media provides an opening as outlet for the air. The plate can be mounted for a right or left blowing direction, depending on the requirements.

Install the NAMOS paylane media in a way that no direct solar radiation on the display may occur. Direct solar radiation will heat up the display and may cause a black screen.

The height for operating devices must not exceed 1.38 meter according to the needs of handicapped people.

The NAMOS paylane media must not be exposed to conductive dust.

The installation of the NAMOS paylane media has to be carried out or supervised by authorized qualified personnel with profound knowledge of explosion protection.

Installation dimensions having to be followed may vary from country to country. Therefore, it is mandatory to meet these country specific laws and regulations.

The electrical installation in the building / fuse box has to provide a separator to completely disconnect the NAMOS paylane media from the system voltage.

Both electrical circuits (for the heating and the system) have to be disconnected for a complete disconnection of the system voltage.

The value for an UPS device (BEETLE, 2 displays, 2 printers) must be at least 200W.

After a rapid shut down at 50 °C wait for about 30 minutes. Then turn off the switch of the power supply at the rear side of the BEETLE and switch it on again.

NAMOS paylane media must not be cleaned with a high pressure cleaner!

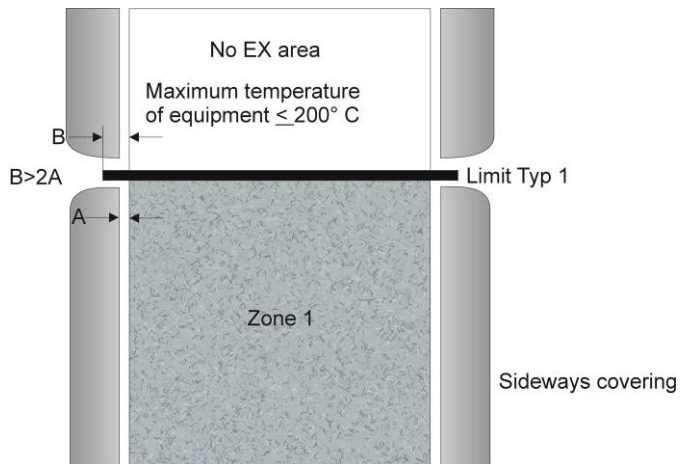
Safety Requirements

The installation of the NAMOS paylane media has to comply fully with specific petrol station legislation requirements. In accordance with “EN 13617-1” especially the distances have to be observed.

Extract of the picture part “EN 13617-1”

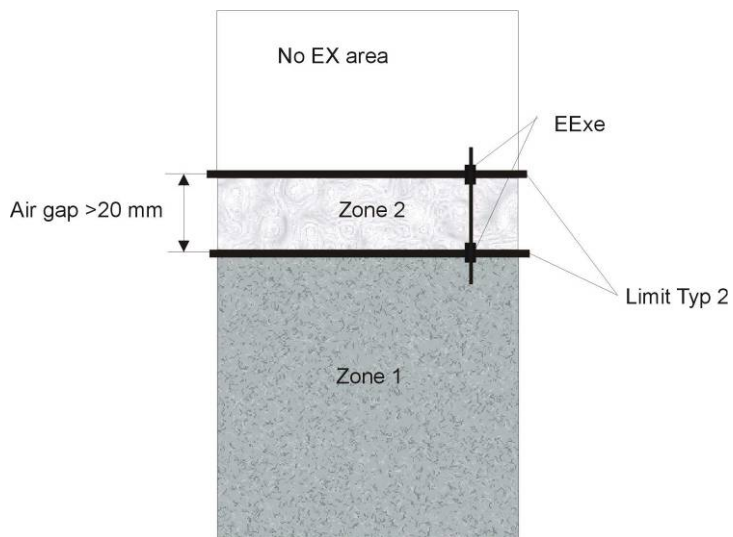
Type I

Fully closed limit without lead through and recess.

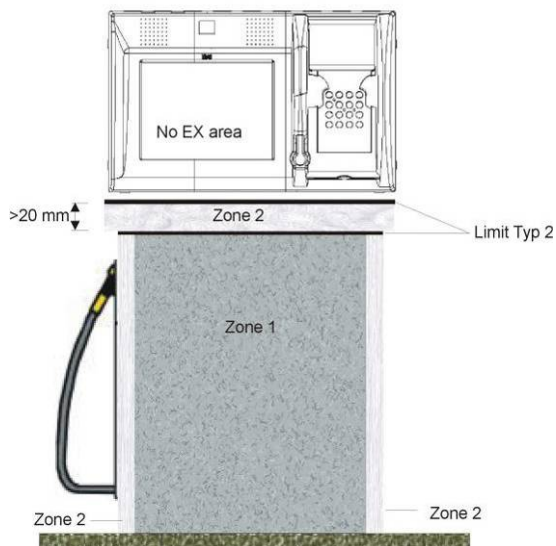
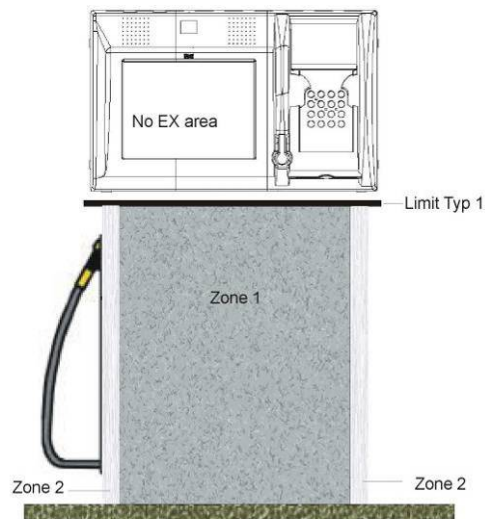


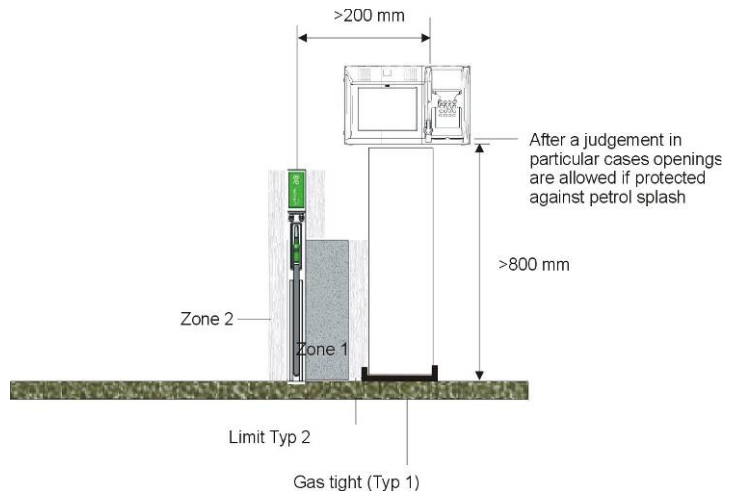
Type II

Two fully closed limits with leads through according to explosion protection EExe and separated by a non-covered air flow of min. 20mm.

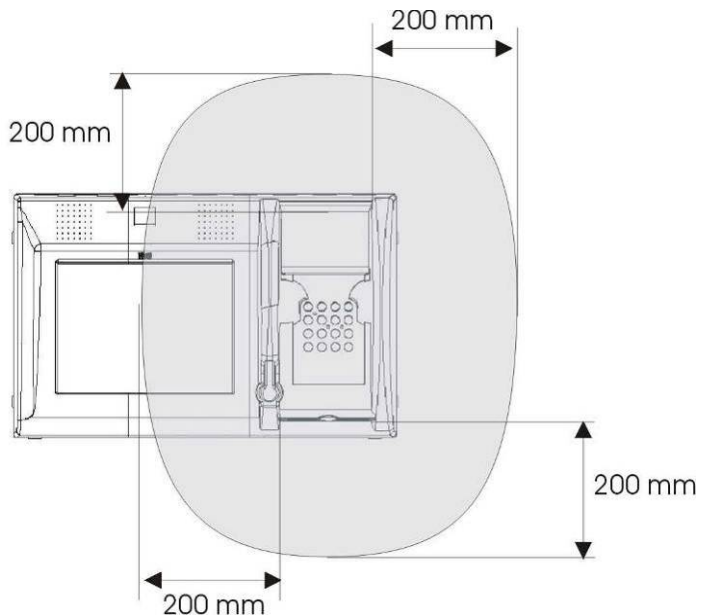


Determination of areas with explosive risk.

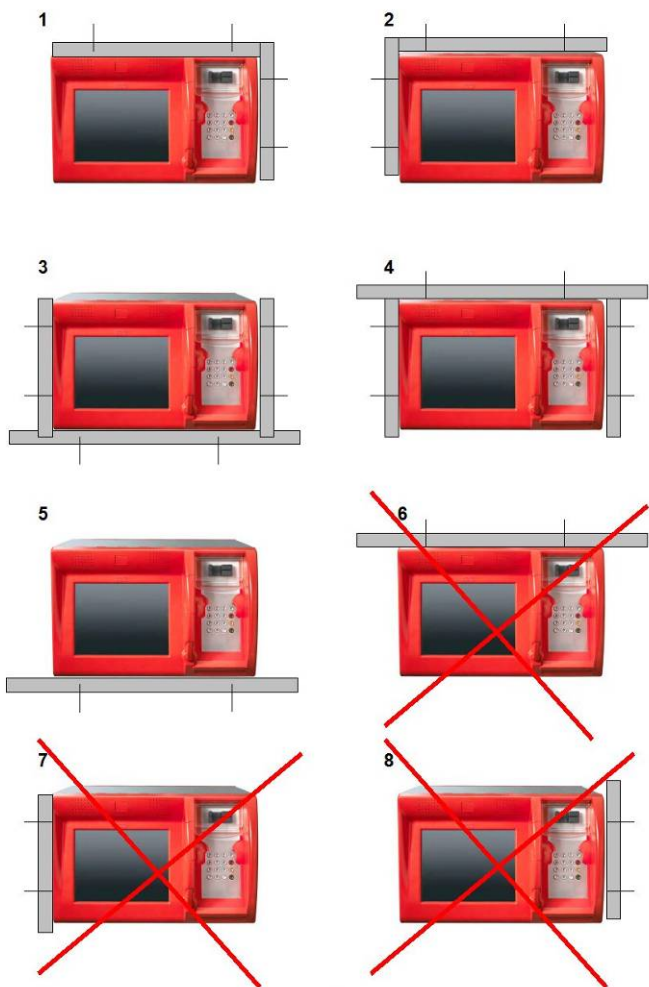




The distance between the control panel and the fuel dispensing nozzle must be 200 mm minimum.



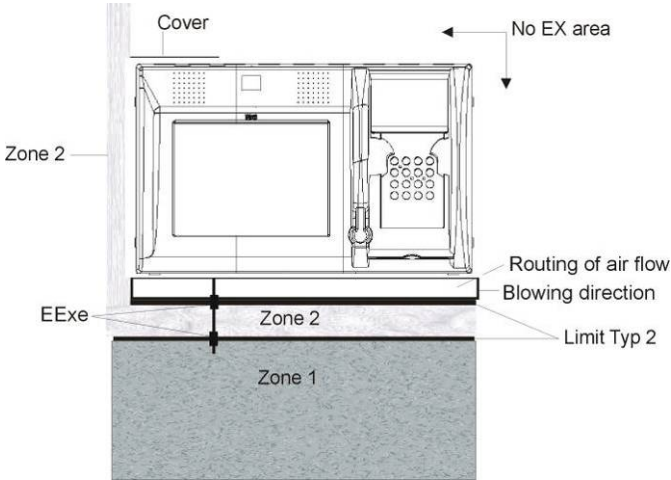
Possible Mounting Variants



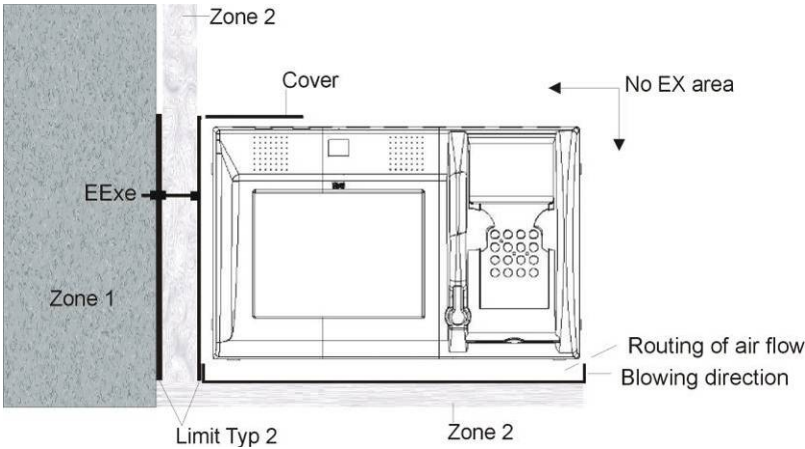
Mounting variants 6 to 8 are not allowed !

Standing Installation

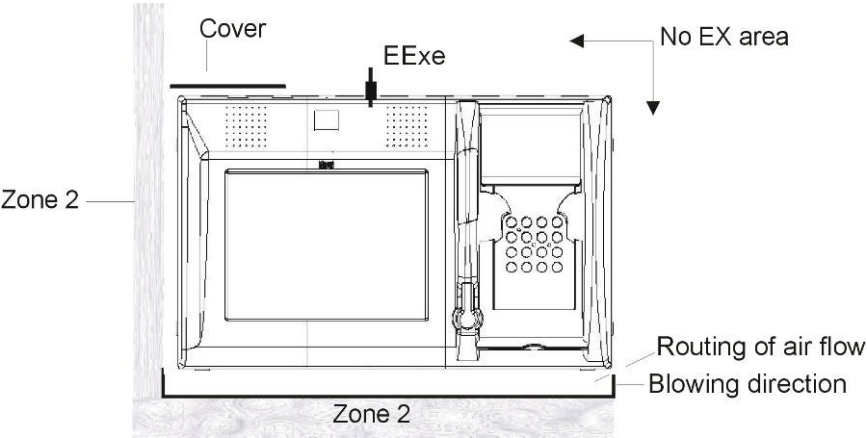
If ventilation slots are located directly to zone 2, some of them must be closed with a cover. Turn the top plate of the NAMOS paylane media in the appropriate direction (see page 18).



Installation Sideways



Hanging Installation



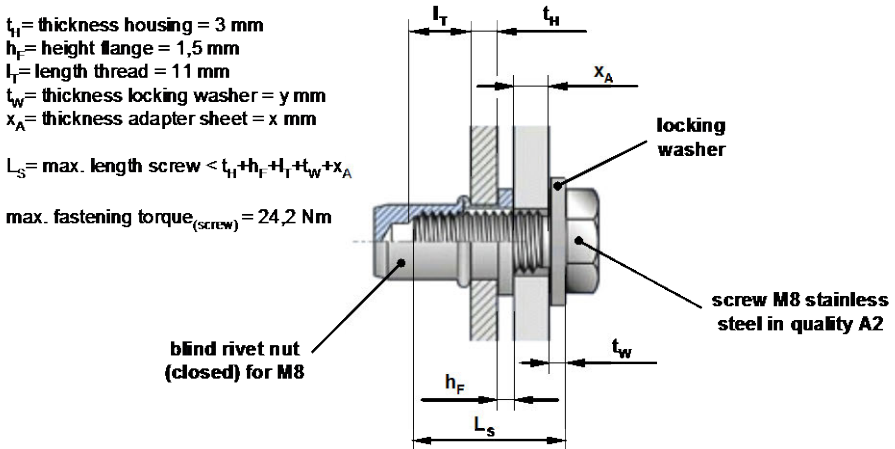
Screws

The NAMOS paylane media is prepared for several installation variants. The technician may have to use adapters to arrange the different needs.

The screws for fixing the NAMOS paylane media on the adapter have to fulfill the following requirements:

Blind Rivets

Blind rivet nut at the right and left hand side of the housing

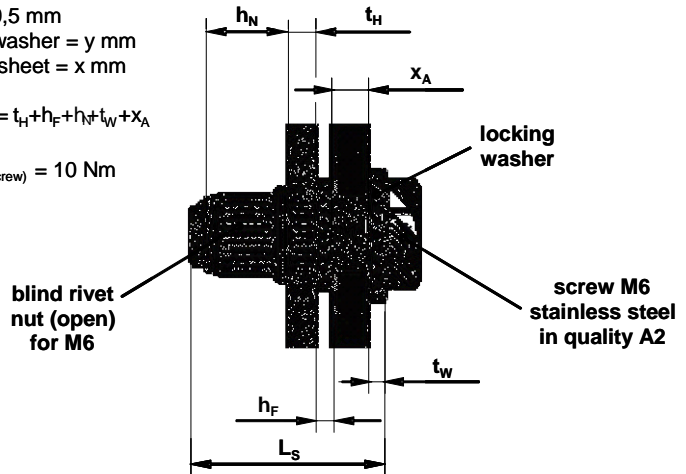


Blind rivet nut at the bottom plate

t_H = thickness housing = 1,5 mm
 h_F = height flange = 1,5 mm
 h_N = height rivet nut = 9,5 mm
 t_W = thickness locking washer = y mm
 x_A = thickness adapter sheet = x mm

L_S = max. length screw = $t_H + h_F + h_N + t_W + x_A$

max. fastening torque_(screw) = 10 Nm



See for an even fitting of the adapter sheet on the flanges without a gap.

Always use four of these screws with any installation variant.

Connecting the NAMOS paylane media

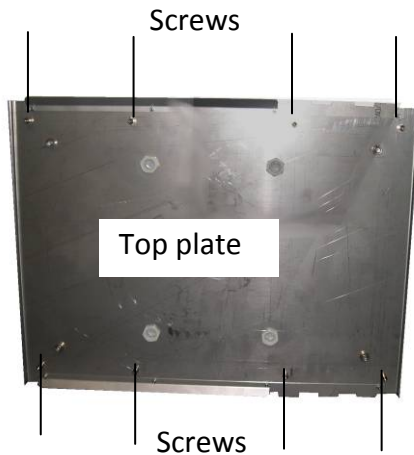


Warning: This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that a fuse or circuit breaker not larger than 240 VAC, 10A, is used on the phase conductors!

After determination of an appropriate location the NAMOS paylane media must be provided with cables.

Unlock and pull out the front cover.

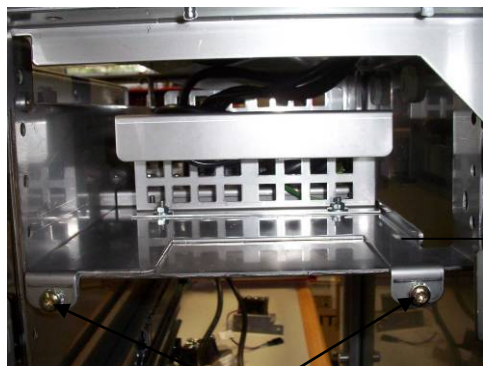
To withdraw the top plate remove four screws each at the front and at the rear side from inside the housing.



Screw with view from inside the housing

Guide the two power supply cables from the petrol pump through the cable lead according to EExe (see cable glands with diameter 16 in the chapter 'Dimensions').

Loosen the two screws on the cable distributor base and pull the base plate forwards.



Base plate

Screws

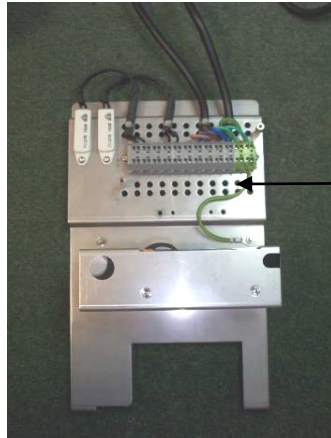
Unplug the sensor connectors.

Loosen and remove the two screws from the cable cover to get access to the electrical installation area.



Cable cover screws

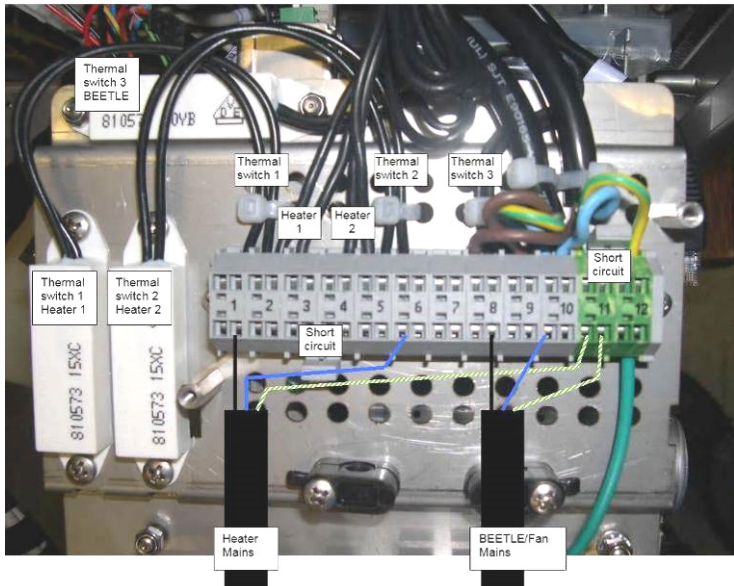
Sensor connectors



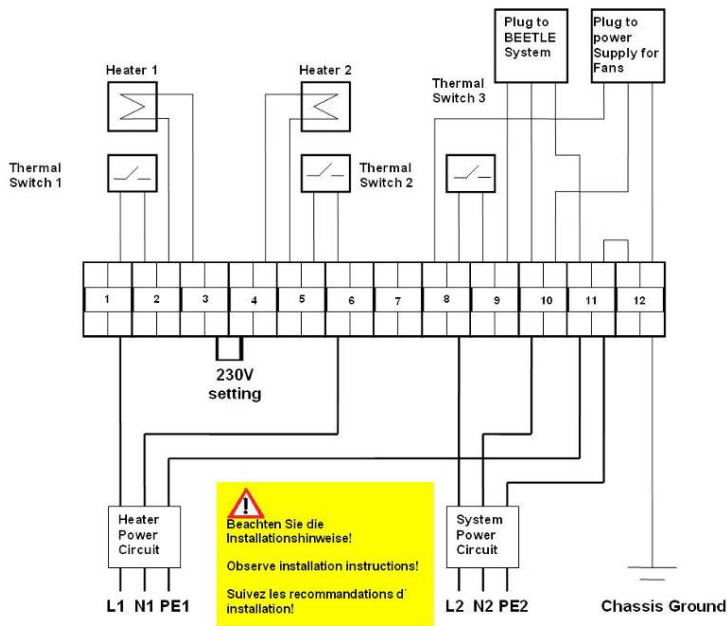
Cable distributor

Guide the cables in a sufficient length (approx. 40 cm) into the housing and to the previously pulled out cable distributor.

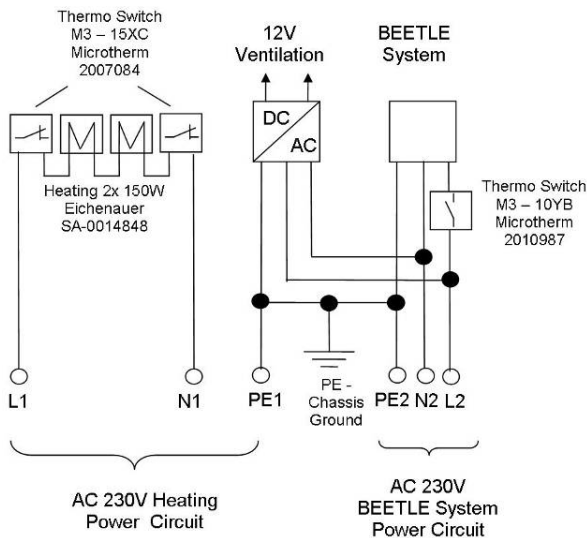
Connect both ends of the cables to the cable distributor as shown in the following picture and diagram.



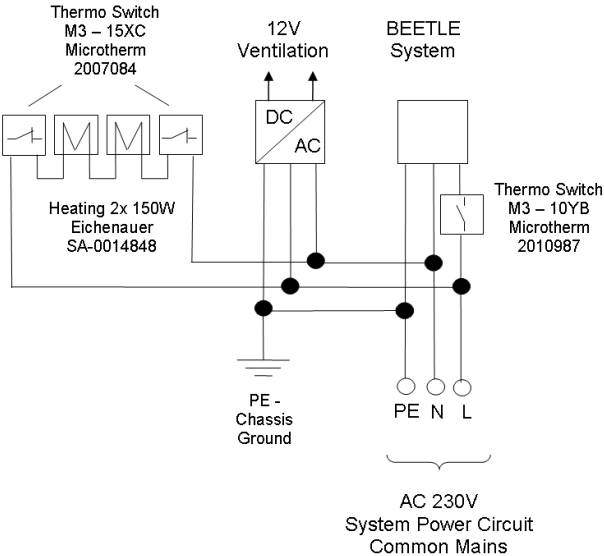
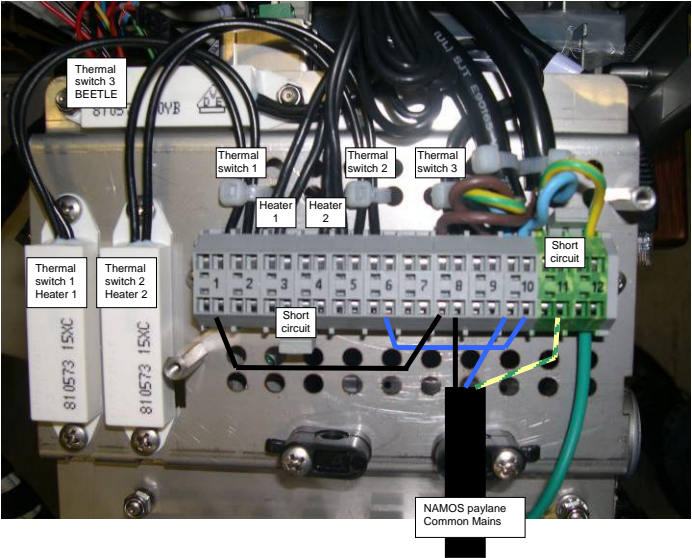
A sticker of this diagram is located on the cable cover.



A different presentation

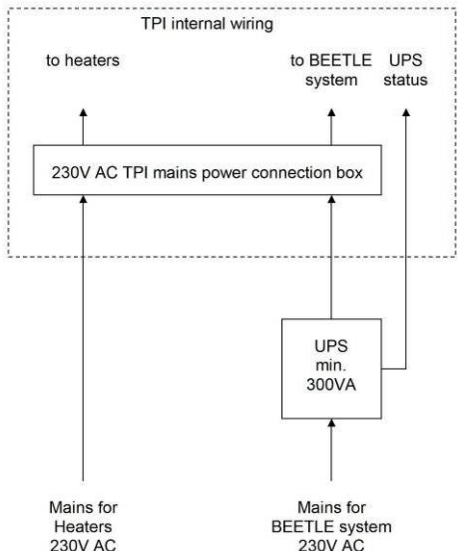


For a configuration with only one power circuit observe the different cabling in the following picture and diagram.

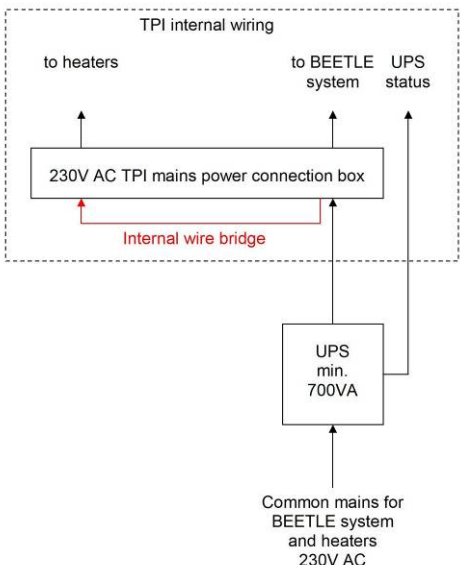


Cabling diagrams with UPS

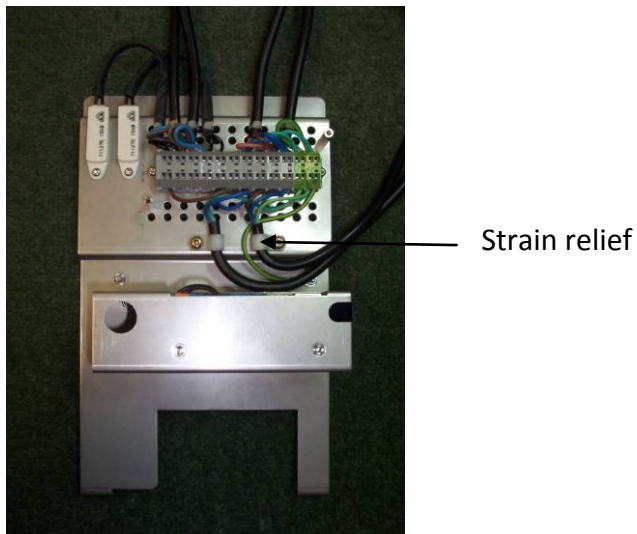
Two power circuits



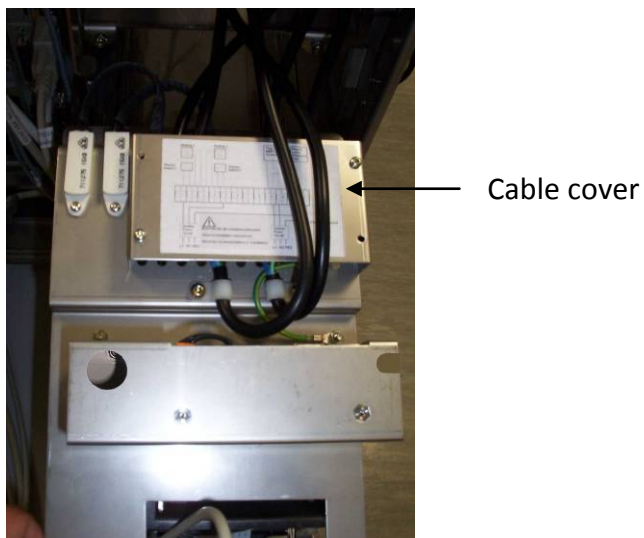
One power circuit



Secure both cables with the strain relief.



Then mount the cable cover over the cable distributor.



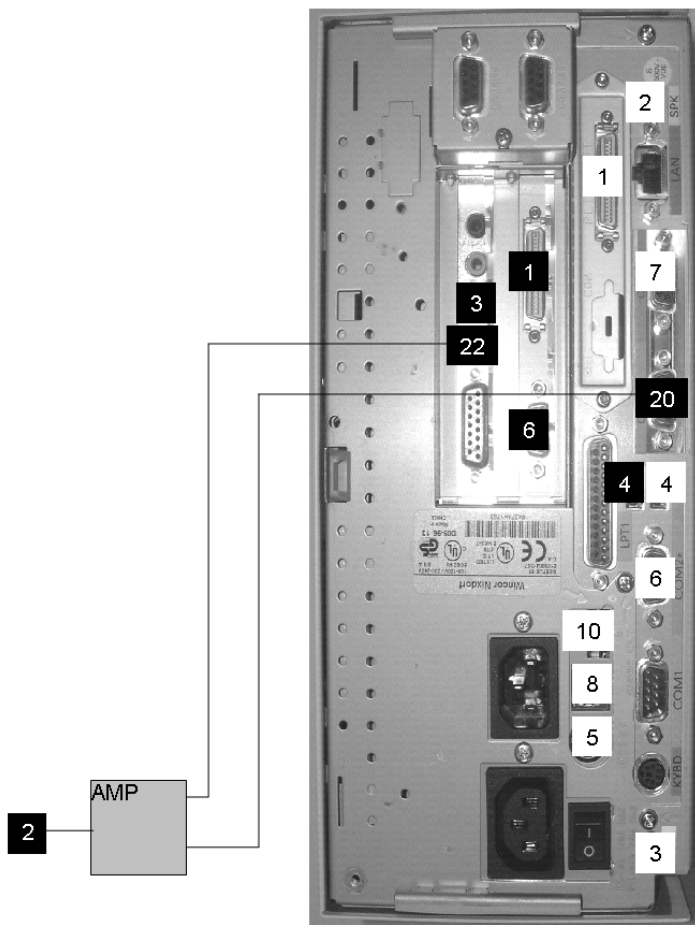
After the electrical installation the sensor connectors must be reconnected



Sensor
connectors

Push the cable distributor base plate into the housing and fix the base plate with the previously loosened screws.

Cable Connections BEETLE /M



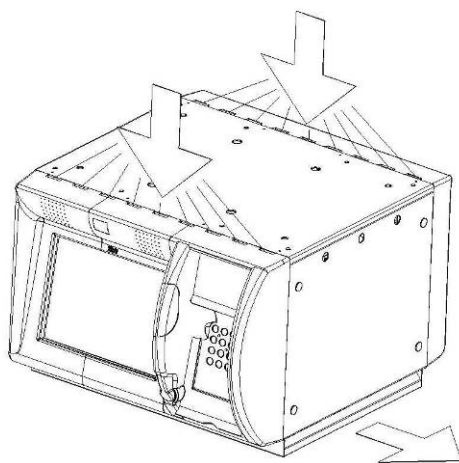
Black marked connectors is added to the white marked connectors for a double sided version.

Dimensions

The NAMOS paylane media is prepared for several installation variants. The technician may have to use adapters to arrange the different needs.

Hanging and Sideway Installation

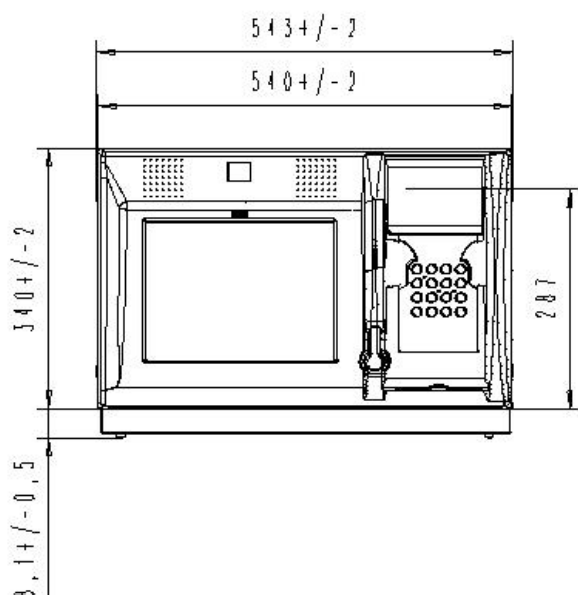
Slots for the inflow and blow out air must always be free. Make sure that the air blown out can not find its way to the area of inflow air (thermo by-pass).



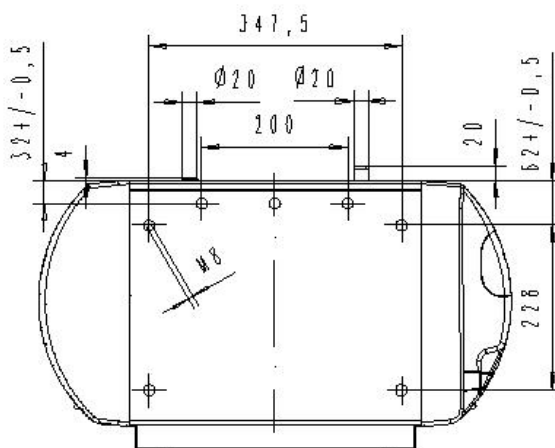
Routing of air flow

Blowing direction

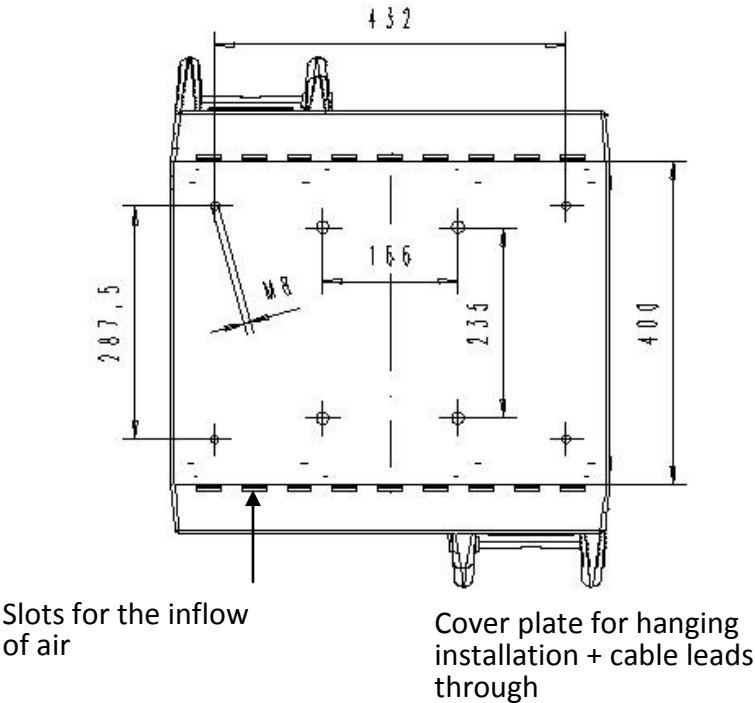
Front View (with Bottom Air Guide)



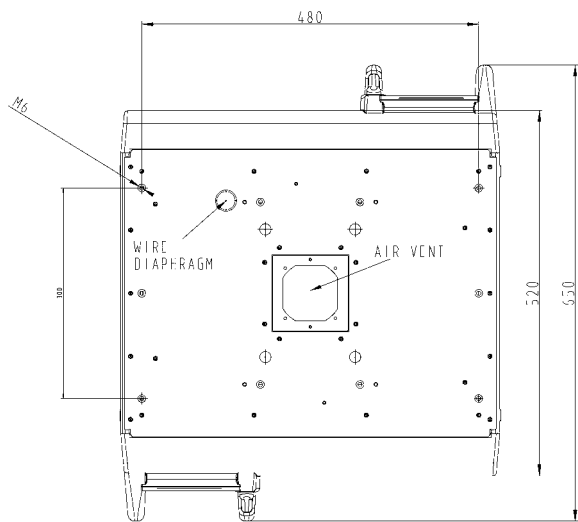
Side View (with Bottom Air Guide)



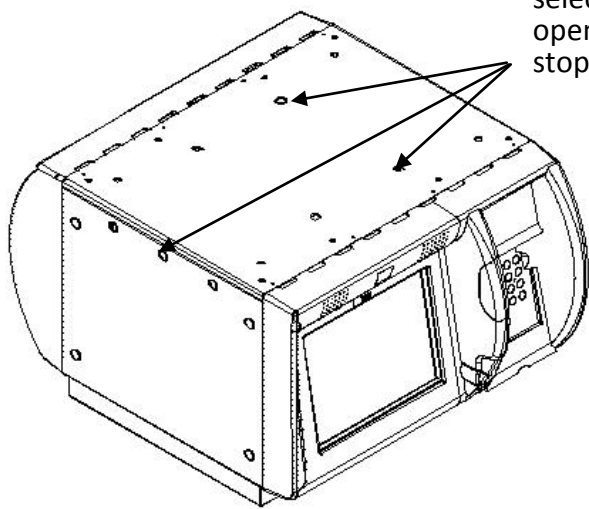
Top View



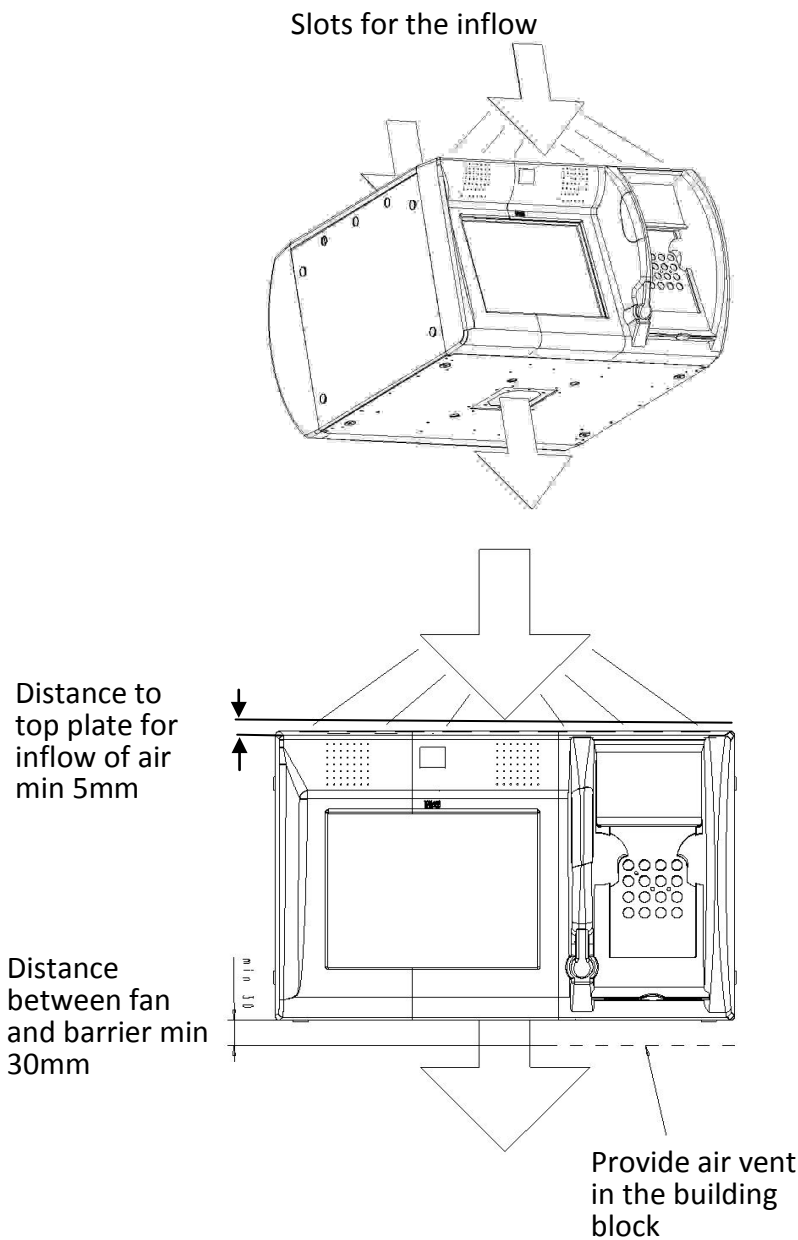
Bottom View (w/o Bottom Plate)



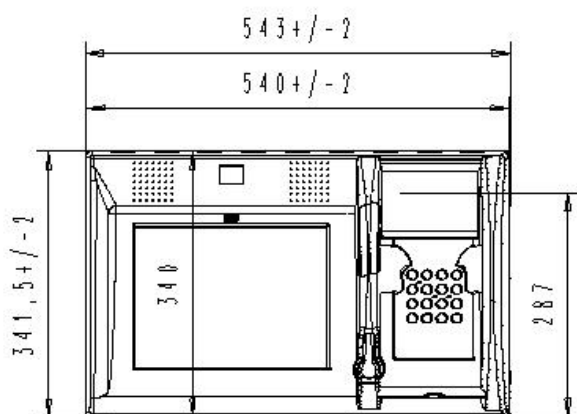
Cable glands for diameter 16 free selectable. Not used openings covered with stopping plugs.



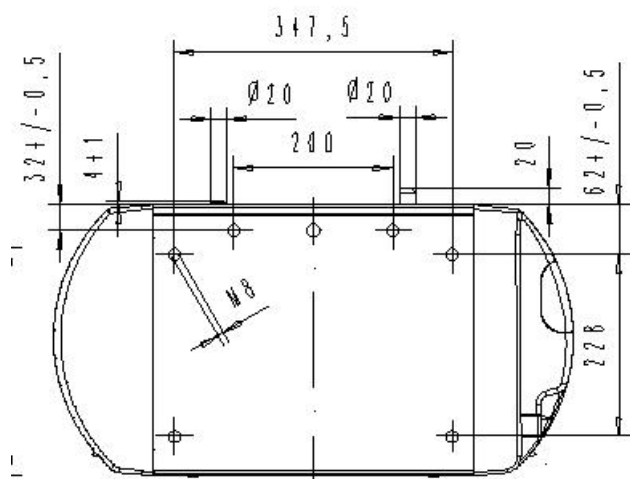
Build-in Installation



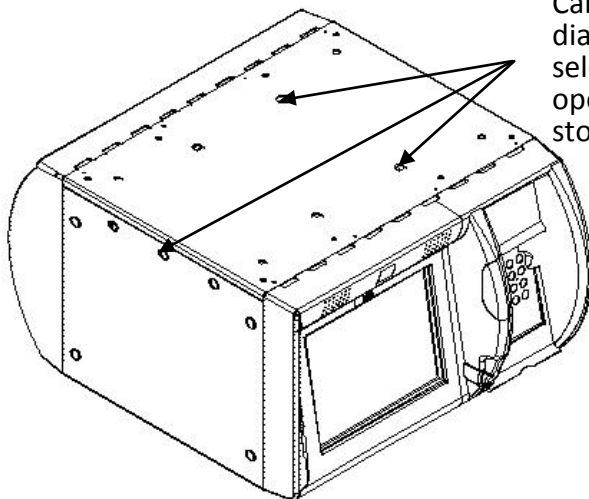
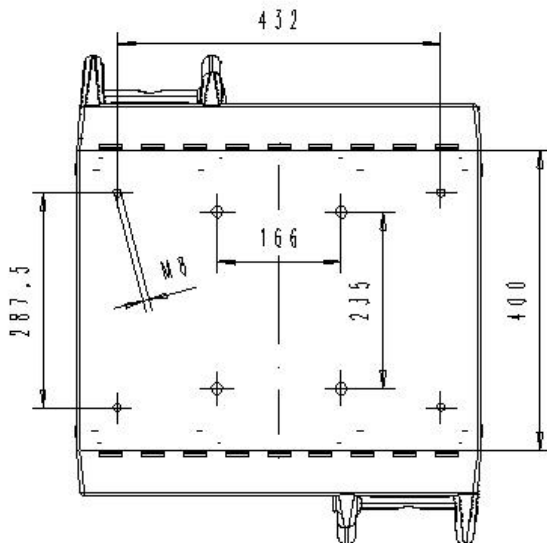
Front View (w/o Bottom Air Guide)



Side View (w/o Bottom Air Guide)



Top View



Cable glands for diameter 16 free selectable. Not used openings covered with stopping plugs.

Technical Data NAMOS paylane media

Versions:	Single sided version (SS); Double sided version (DS)
Options:	Integrated loudspeaker and microphone; Proximity sensor or Camera; WLAN; Pedestal Top hood (company-colored);
Housing:	Stainless steel or company-colored housing with PC/ABS front cover. The NAMOS paylane media is mountable on common petrol pumps in every useful orientation. Intrusion sensor (door open sensor); Lighting for card reader and pinpad; Keylock;
Dimensions:	Dimensions over all incl. front covers (W x H x D in mm): 540 x 340 x 520 (with blinds SS: 585/DS: 650).
Weight:	SS version: 57 kg (without paper and packaging) DS version 70 kg (without paper and packaging)

Computer System	Wincor Nixdorf BEETLE /M LAN 10/100 MBit/s (RJ45/Twisted Pair); 4x (8x in DS) COM; 2x USB 1x (2x in DS) TFT PLINK interface; 1x (2x in DS) Audio MIC/SPK
Display:	Wincor Nixdorf BA72A-2 Display size: 12" TFT; LCD Techn.: TFT, 18 Bit; Colour: RGB 16, 256, 64k; Resolutions: 800 x 600 pixel (SVGA); Pixel Format: 0.3mm x 0.3mm; Brightness: approx. 200cd; Frequencies: Horiz. 29Khz, Vert. 47Hz; Reading angle: right/left +/- 35°, top/bottom +/- 20°; Backlight: Twin lamps CCFL, Inverter;
Touch Screen:	Technology: Analogue capacitive; Thickness: 8mm security glas (ToughTouch); Resolutions: 999 x 999 pixel;

Printer:	<p>Wincor Nixdorf Thermal printer TP07-OPT</p> <p>Cutter unit with full cut operation;</p> <p>Presenter function;</p> <p>Retract function (Store at least 10 retracted receipts of 70 mm to 210 mm length with paper roll diameter down to 40 mm);</p> <p>Paper end sensor;</p> <p>Paper near end sensor;</p> <p>USB 1.1 interface;</p> <p>Print speed: 150 mm/s</p>
Paper roll specification:	<p>Inner core diameter: 40 mm / +1mm</p> <p>Outer diameter: max. 180 mm</p> <p>Paper width: 80 mm / -1mm</p> <p>Paper weight: 80g/m² +/-4%</p> <p>Paper quality: OJI KF50 – HDA or equivalent</p> <p>Paper thickness: 0.06 – 0.09 mm</p> <p>Smoothness: (Bekk.) min. 300 sec.</p> <p>Core material: plastic or board</p> <p>Core wall thickness: 3mm +/-0.3mm</p> <p>Paper end not glued with core</p> <p>Paper sensitive coating outside</p>
Keyboard (Pinpad)/	Customer/Country specific
Card reader:	
Mains power consumption:	200-240V~, 50Hz, 2.1A
(type label)	

Separate mains for
system and heating!

System: 220-240V~, 50Hz, 0.7A
Heating: 220-240V~, 50Hz, 1.4A

Connectivity:

Mains power connection cables:
Flexible cord e.g. VOLEX H05VV-F
3G0.75mm²
LAN connection cable
Shielded Twisted Pair (STP) CAT 5
UPS for system backup power: min.
200W

Operating conditions:

-40 °C up to +45 °C; rel. Humidity 5% -
95% not cond.
EN 60068 class 3M2

Transport conditions:

-10 °C up to +70 °C; rel. Humidity 5% -
98% not cond.
EN 60068 class 2M2

Approvals / Certificates:

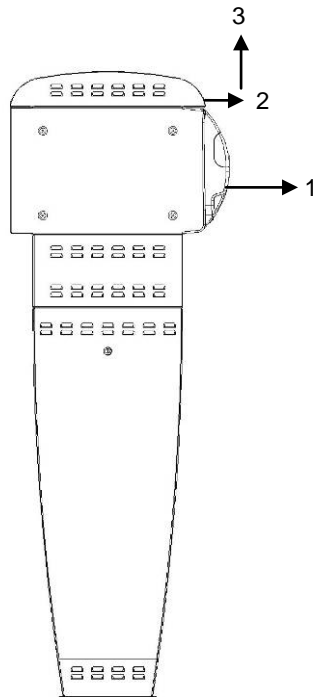
CE mark
GS mark, if required
IP44

NAMOS paylane media Standard Pedestal Version

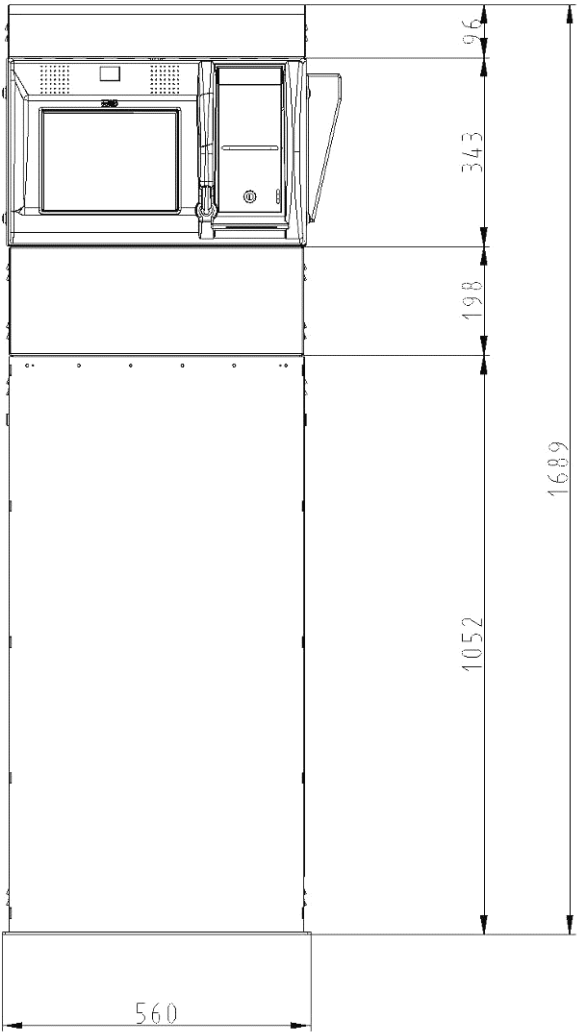
If the OPT is mounted on a pedestal you also have to remove the hood.

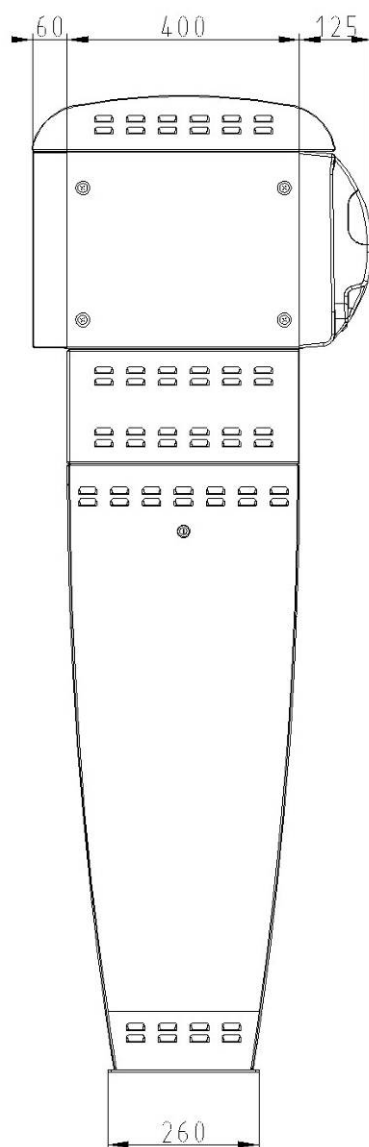
Open the front cover and pull it out (1).

Pull the hood slightly to the front (2) and lift it to the top (3).



Measurements for Standard Pedestal





Installation Requirements

- Screws noncorrosive stainless steel, tensile force $\geq 40\text{kN}$
- Washers noncorrosive stainless steel
- Weatherproof base (tight connection, pressure-resistant) horizontal and plain surface

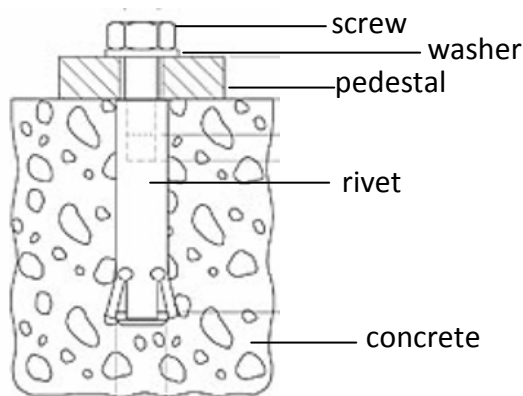
Installations Proposal

Concrete: stressed and unstressed from B25 to B55 or C20/25 to C50/60 (Hint: concrete drying time > 24 days)

Rivets: Fischer FZA 18x80 M10 I stainless steel A4 or equivalent

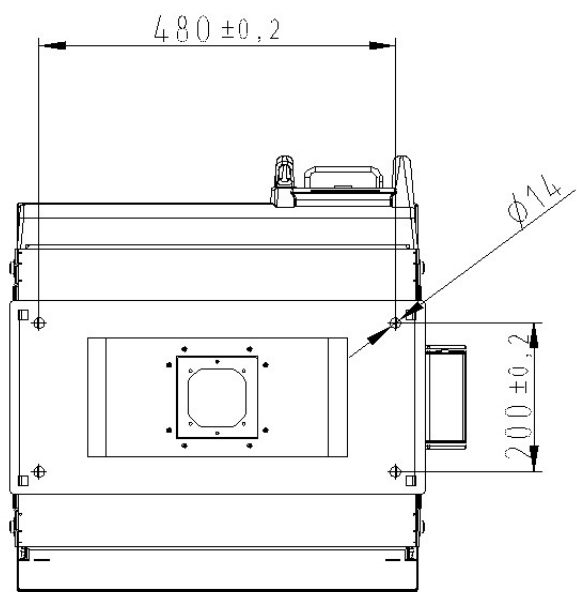
Screws: Allen head screw, noncorrosive steel:
DIN 912 A4-80 M10x25 (max. M10x30)

Washers: DIN 125 A4 10.5

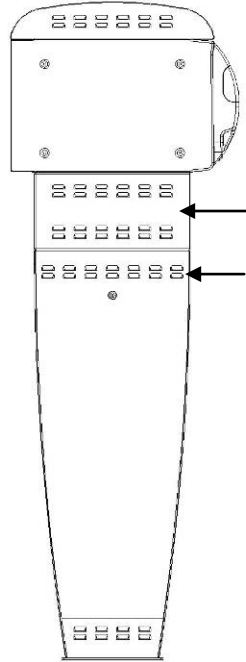


„Consider the installation guidelines of the anchor supplier especially regarding the boreholes and the torque!“

Drill Positions for the Pedestal



Ventilation Slots



Ventilation slots (see arrows) with air flow in direction to an EX area are not allowed. They must be covered with metal plates from inside.

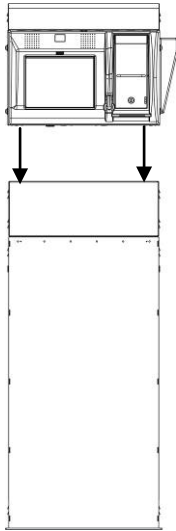
Read also the chapter “Guidelines” and “Legislation requirements”.

Mounting the NAMOS paylane media on the Pedestal

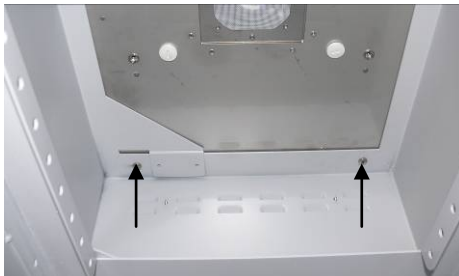
Lift the OPT device onto the pedestal.



This must always be carried out by two persons.



Secure the device from inside the pedestal with four screws (Hexagon Bolt ISO4017 A2-50 M6x16) and four washers (DIN125_A2_6.4) using a jaw wrench SW10 with a max. fastening torque of 4.75Nm.



View from inside the pedestal to the bottom of the OPT device

Mounting the Pedestal Doors

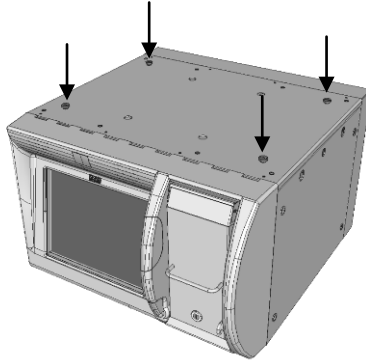
Set the bottom of the door in the pedestal (1).
Tilt the door towards the stand (2) and lock the door (3).



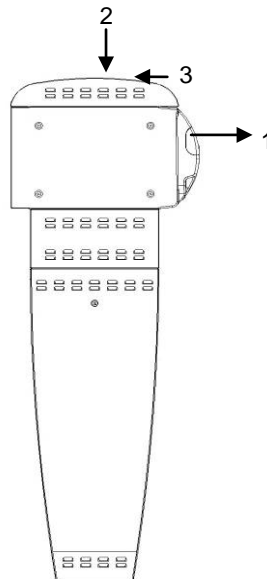
Repeat the steps for the second door.

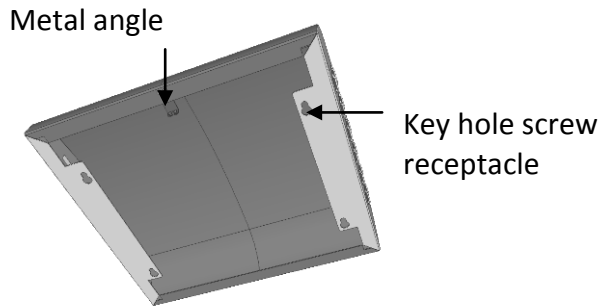
Mounting the Hood

Insert four shoulder screws (DIN 923 M8x4) on top of the OPT (see arrows).



Open the front cover and pull it out (1). Place the hood on top of the OPT (2) so that the key hole screw receptacle of the hood will fit to the shoulder screws. Push the hood backwards (3).





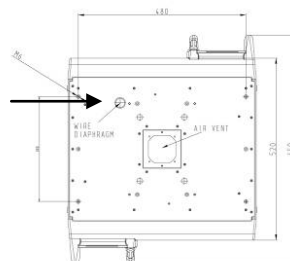
When closing the front cover the metal angle on front of the hood will secure the hood from removing.

Mains cable from power installation

Guide the mains cable from the bottom of the pedestal to the bottom of the OPT device. Cut a cross (as small as possible) into the membrane of the 25 mm cable gland and put the cable through.



Location of cable gland with membrane



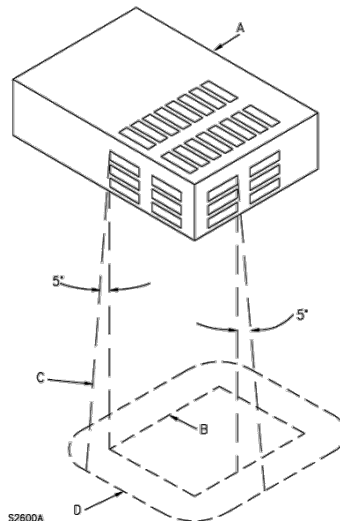
Fix the cable inside the pedestal at appropriate positions with cable binder.

NAMOS paylane media Individual Pedestal

Mounting Requirements

NAMOS paylane media was designed in accordance to EN60950-1 (Safety of ITE Equipment). By removing the base plate from the system as required for integration of NAMOS paylane media into a stand, an important part of the fire enclosure is removed. Without base plate, NAMOS paylane media is SUITABLE FOR MOUNTING ON CONCRETE OR OTHER NON-COMBUSTIBLE SURFACE ONLY.

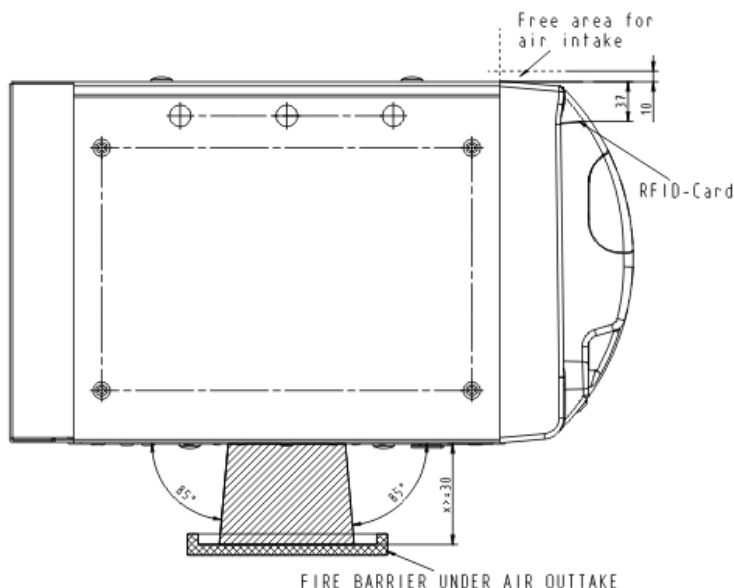
The bottom of a fire enclosure or individual barriers shall provide protection under all internal parts, including partially enclosed components or assemblies, which, under fault conditions, could emit material likely to ignite the supporting surface. The bottom or barrier shall be located as, and no smaller in area than, indicated in this figure.



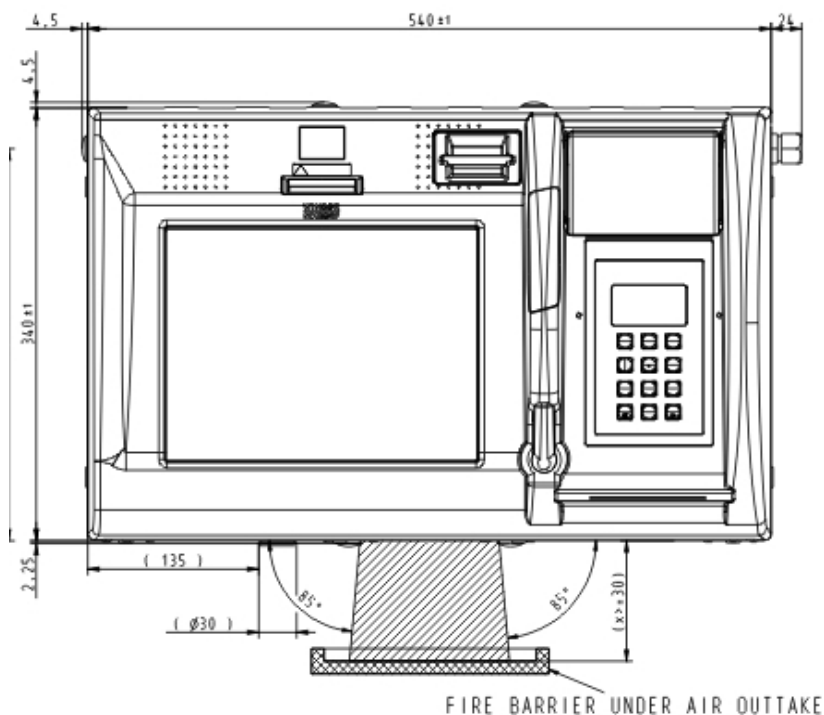
All parts in the area shown in this figure must be of material with flammability class min. UL94 5V (metal or concrete is accepted). Another possible solution would be to integrate a barrier of metal or 5V rated material to reduce area D. NAMOS paylane media is also designed and tested to meet all thermal requirements including the requirements described in IEC60950-1 clause 4.5 - ventilation should be sufficient when NAMOS paylane media is integrated into a machine base.

Fire Barrier Solution

To fulfil the above mentioned requirements, a solution with a fire barrier for the NAMOS paylane media is shown in the following pictures.



A fire barrier made of the required material has to be installed underneath the air outlet of the NAMOS paylane media in an appropriated size and distance.



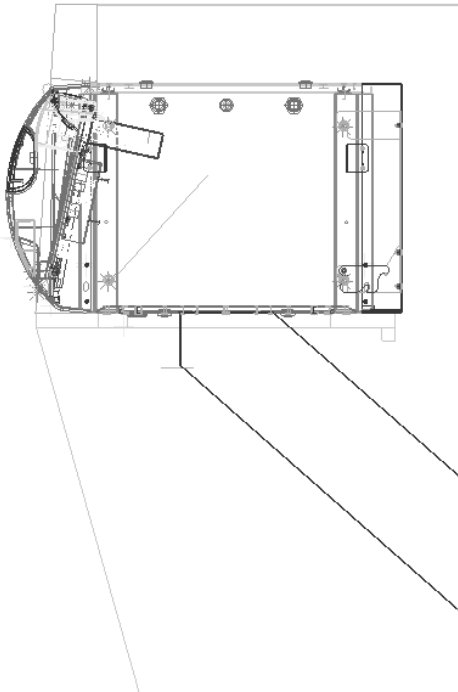
Air Channel Solution

Installing an air channel into the stand will avoid a thermal short-circuit and will serve as a fire barrier.

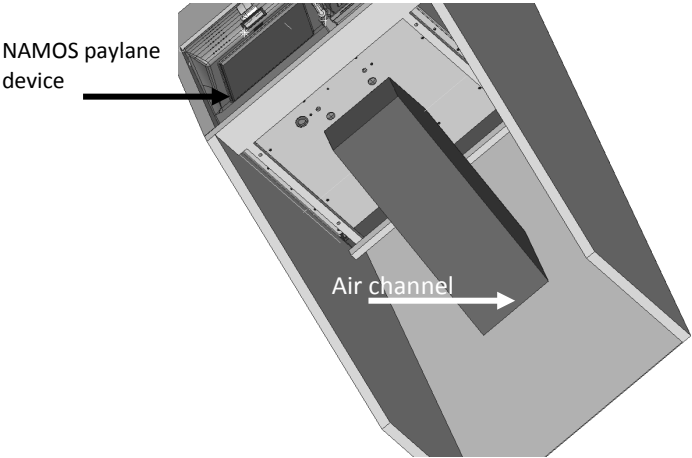
The air channel leads the air outtake from the NAMOS paylane media to the stand outlet. The air channel must be designed in a way that it fulfils the safety requirements of a fire barrier.

An example is shown in the following pictures.

Side View

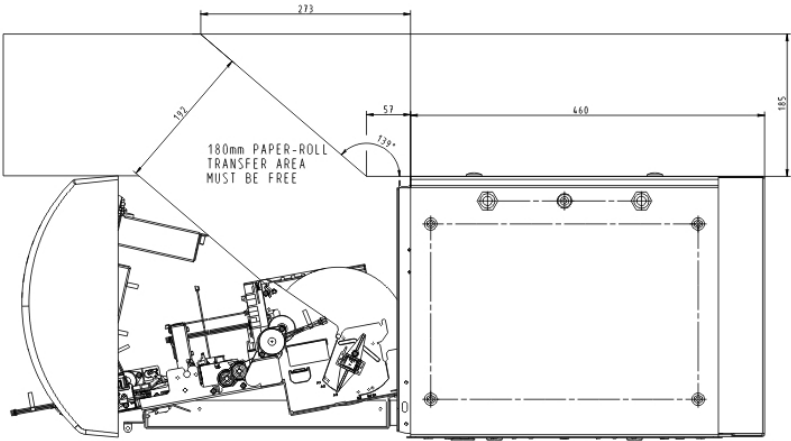


Bottom-up View



Printer Maintenance Area

The individual stand design must observe a sufficient maintenance area for the printer.
The space between the front cover pulled out and the front of the stand must allow an easy changing of the printer's paper roll.
For measurements see picture below.



Cable

The power supply cables for the BEETLE system and for the heating must be connected to separate circuits.

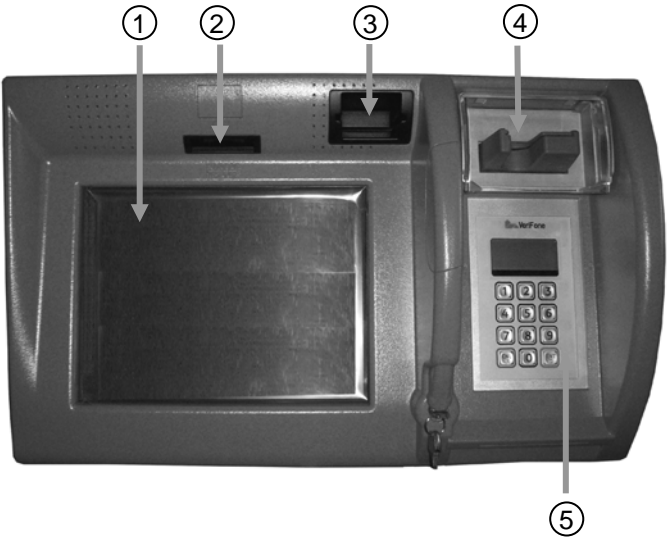
The power supply systems must be equipped with separately guided protective earth conductor (PE). This kind of electricity system is known as TN-S network. Do not use PEN conductors! Please also observe the recommendations of the norm DIN VDE 0100, Part 540, Appendix C2 as well as EN50174-2, §5.4.3.

Thus you can help to avoid possible malfunctions.

Two cable glands for diameter 20 and one for diameter 16 are installed ex works. For other cable diameter use appropriate cable glands.

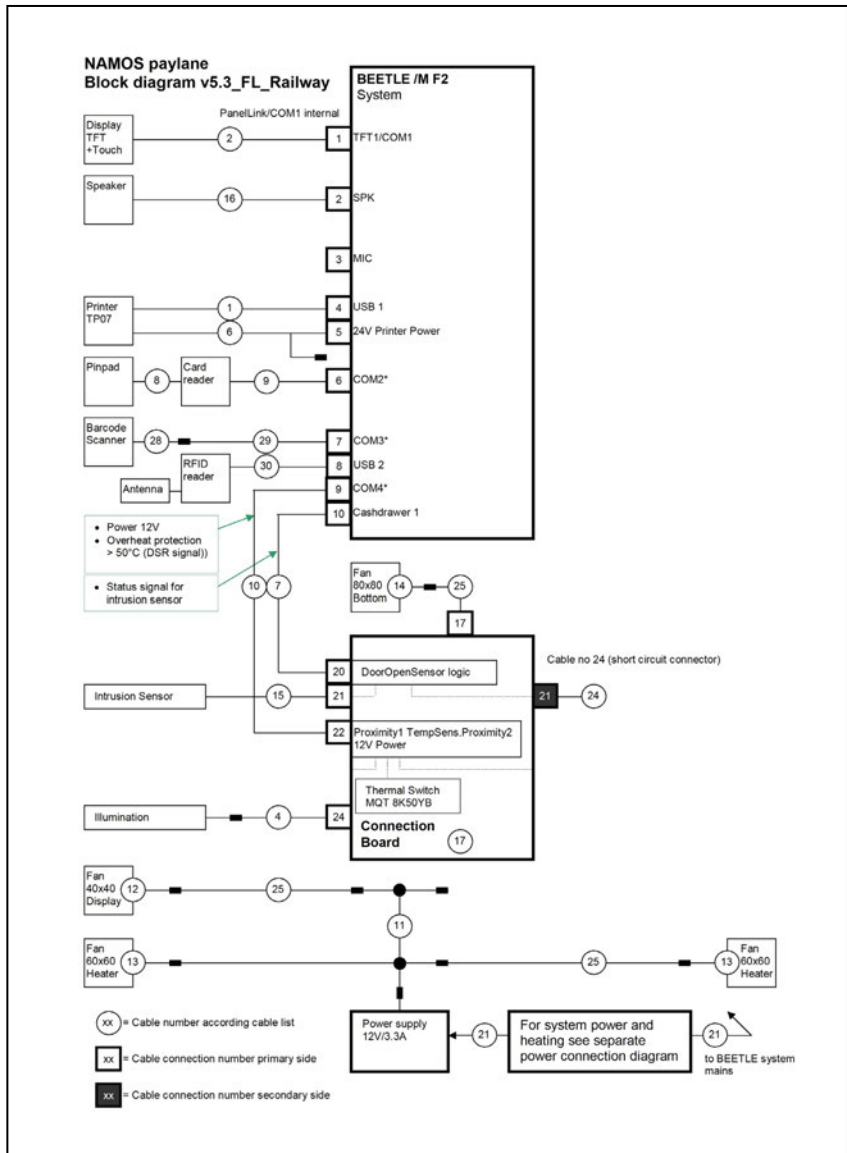
NAMOS paylane media Version with additional Barcode Scanner and RFID Reader

Front View



①	Touch screen
②	Barcode scanner
③	RFID reader
④	Cardreader
⑤	Pinpad

Block Diagram



Additional Technical Data

Computer System	BEETLE /M Intel Celeron –M, 1.5 GHz 512 MB 4 x COM, 2 x USB 2.0 1 x TFT PLINK interface
RFID reader	Spring crazy writer
Barcode Reader	Symbol SE 3223

Namos paylane media with individual EFT

The NAMOS paylane cash system is a country specific configuration of the NAMOS paylane basic system.

There are differences between the basic description (see above, chapter »Basic Installation«) and specific systems concerning the packaging, connections, scope of delivery and others.



Installing Instruction for the EFT Kit

Recommended Tools

- SW 7 jaw wrench
- Flat headed screwdriver
- SW 5.5 socket key
- SW 10 socket key
- Wire cutter

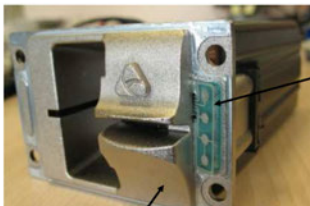


It is required to use ESD-protective clothing while handling the EFT units.

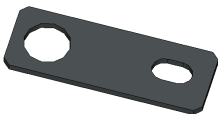
Parts



6x hexagon nut M3 A2 self-locking
2x Flat Tie Holder TM 2S6
1x i9550 cardreader installation kit
1x pinpad to cardreader cable
1x Ingenico i9530 pinpad

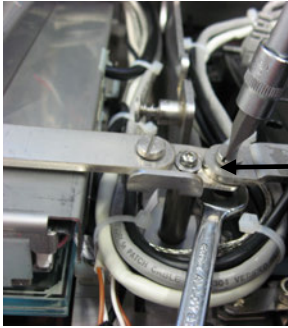


1x Ingenico i9550 cardreader

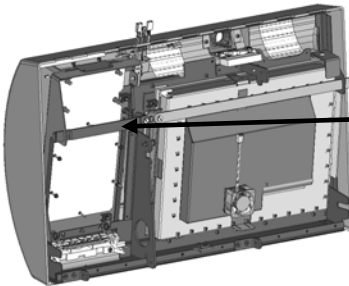


1x Grounding connection for pinpad

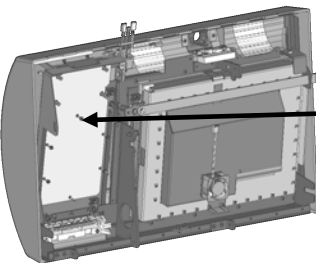
Installing Instruction



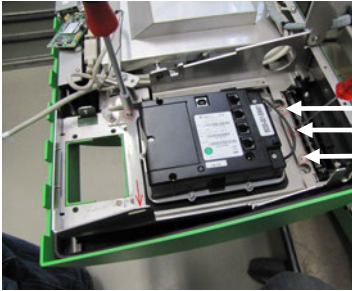
To uninstall the short lock bar open the shoulder screw and the M4 nut by SW 7 jaw wrench and the flat headed screwdriver.



Unscrew 4x M6 nuts and 6x M3 (SW 5.5 socket key) nuts that hold the EFT cover blind.



Keep the M3 nuts for the installation of the pinpad.



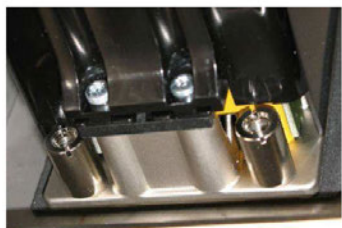
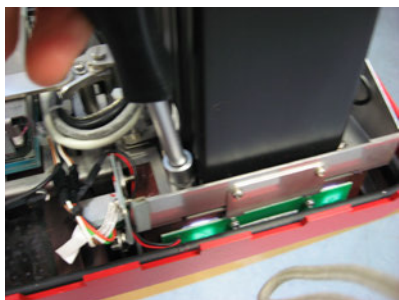
Install the pinpad by the use of the hexagon nut M3 self-locking. Tighten the nuts by a torque of 25 Ncm.



Insert and secure grounding connection for pinpad to one of these M3 studs.



Place the cardreader and the grounding connection for cardreader to the backside and fix it to the M6 studs by the aid of nuts.

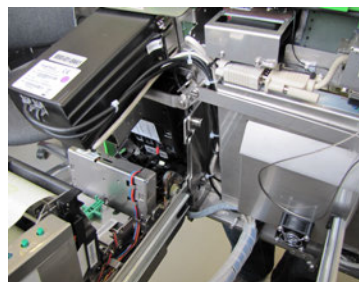




Re-install the short lock bar.
Fix it by the shoulder screw
and the M4 nut.



Connect the red side of the
pinpad to cardreader cable
to the SCR socket of the
pinpad.



Connect the other side of
the pinpad to cardreader
cable to the right socket of
the cardreader.
Connect the 1x EFT power
cable to the pinpad.

Connect the RJ45 LAN cable
to the pinpad.



Connection of pinpad to cardreader



Front of the system after the installation



Make a short test run to validate the function of the system. Check the alarm or the UDRS device stuck in front of the pinpad. Then tighten screws of the pinpad near the sensor side, to a proper torque. Do the same with the reader.

Installing the MOXA NPort 5210A Device Server Box

Recommended Tools

- Torx T10 screwdriver
- Flat head screwdriver

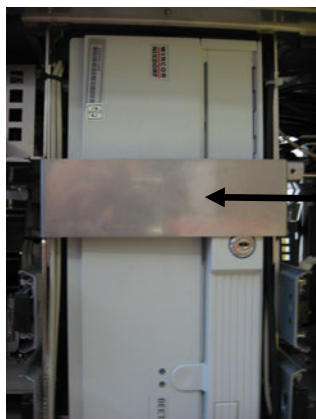
Components

- 1x MOXA box
- 1x 1.0m MOXA power cable
- 1x MOXA bracket (with 2x M3 threads)

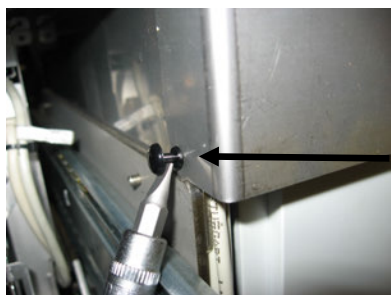
Installation



Note the Mac address of the MOXA Nport 5210A. After the installation the label is no more visible.



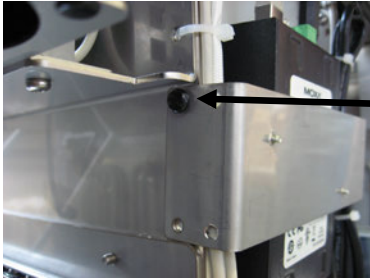
Open the OPT and look for the BEETLE bracket in front of the BEETLE /M



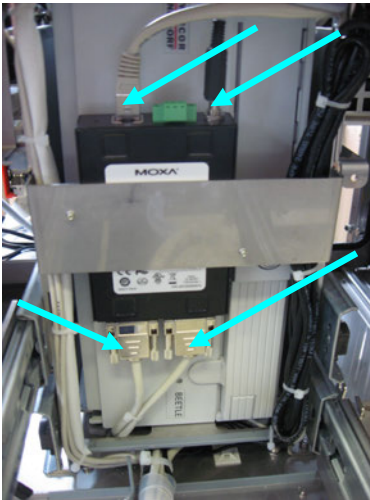
Remove BEETLE bracket by 4x lifting and pulling out the plastic rivets.



Fix the MOXA device to the MOXA bracket in the following way by 2x M3 screws.



Fix the BEETLE bracket by 2x rivets to the old position.



Connect power, 2x RS232 and LAN to the MOXA device.



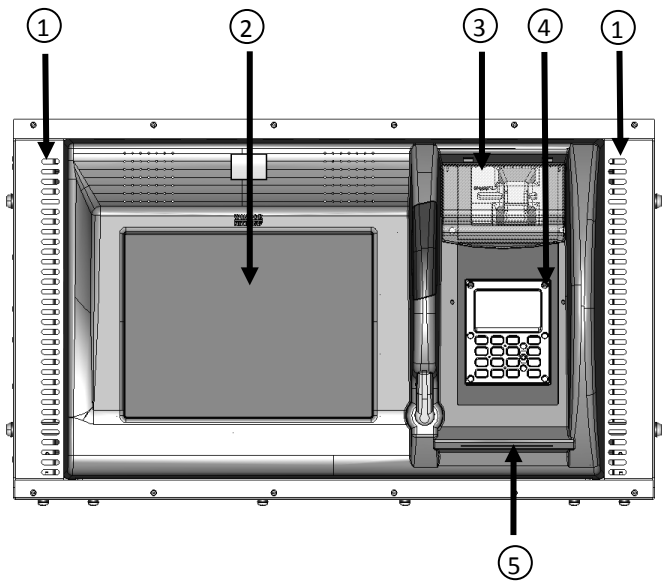
Take care that no cable will be damaged while closing the front. Secure all loose cables by cable ties.

Additional Technical Data

Computer System	Wincor Nixdorf BEETLE /M F2 STD motherboard INTEL Celeron -M 1.5 GHz; 1GB RAM COM3* / COM4* module 3.5'' SATA HDD (standard capacity)
Mains power consumption: (type label)	220-240V~, 50Hz, 6A
Separate mains for system and heating!	System: 220-240V~, 50Hz, 1A Heating: 220-240V~, 50Hz, 5A
Operating conditions:	-40 °C up to +45 °C; rel. humidity 5% - 95% not cond. EN 60068 class 3M2
Transport conditions:	-25 °C up to +60 °C; rel. humidity 5% - 98% not cond. EN 60068 class 2M2
Approvals / Certificates:	CE mark CB IP44;
Weight: (Safe + OPT + Hood)	370 kg

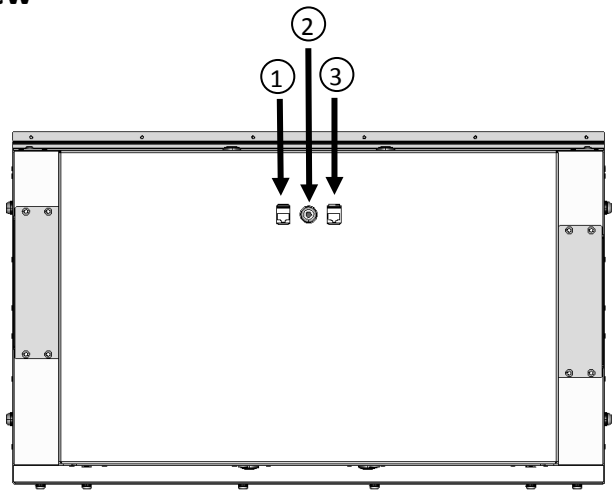
NAMOS paylane media with additional Air Channels and Fans prepared for Integration into a TATSUNO Pump

Front View



①	Air channel
②	Touch screen
③	Card reader
④	Pinpad
⑤	Printer slot

Rear View

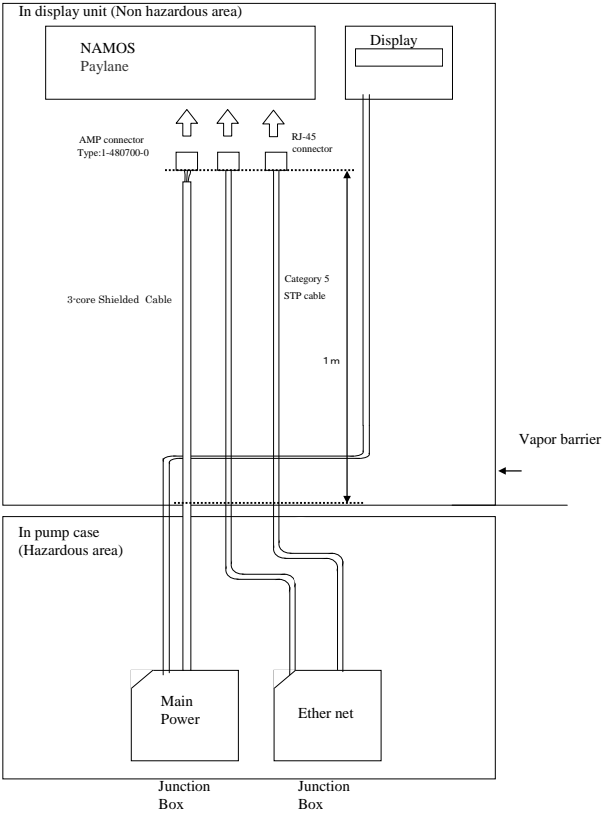


①	LAN connector EFT (RJ45)
②	Power cable (AMP Type 0-0926683-3)
③	LAN connector system (RJ45)

The rear cover is limited to 30 mm depth and includes 2x LAN (RJ45) connectors and one pre-installed power cable with an external length of 1m, 3-pin connector male. The power cable is AMP Type: 0-0926683-3 (counter part to AMP Type1-480700-0 according to the Tatsuno pump station)

The LAN connection is pre-installed for the BEETLE LAN and the Vx700 Pin pad.

Wiring Diagram Tatsuno Display Unit

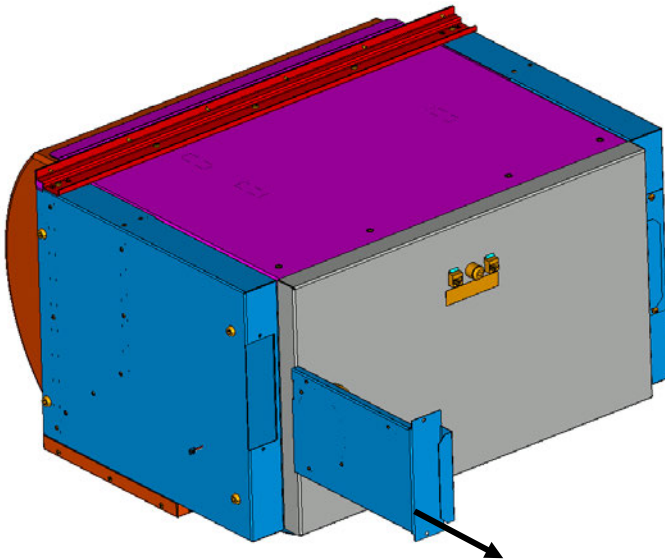


Air channels inclusive fans left and right of the Forecourt Service Terminal (FST) will eliminate the dependency of delta +20K temperature inside the Tatsuno pump.

These air channels are part of the flanges around the FST.

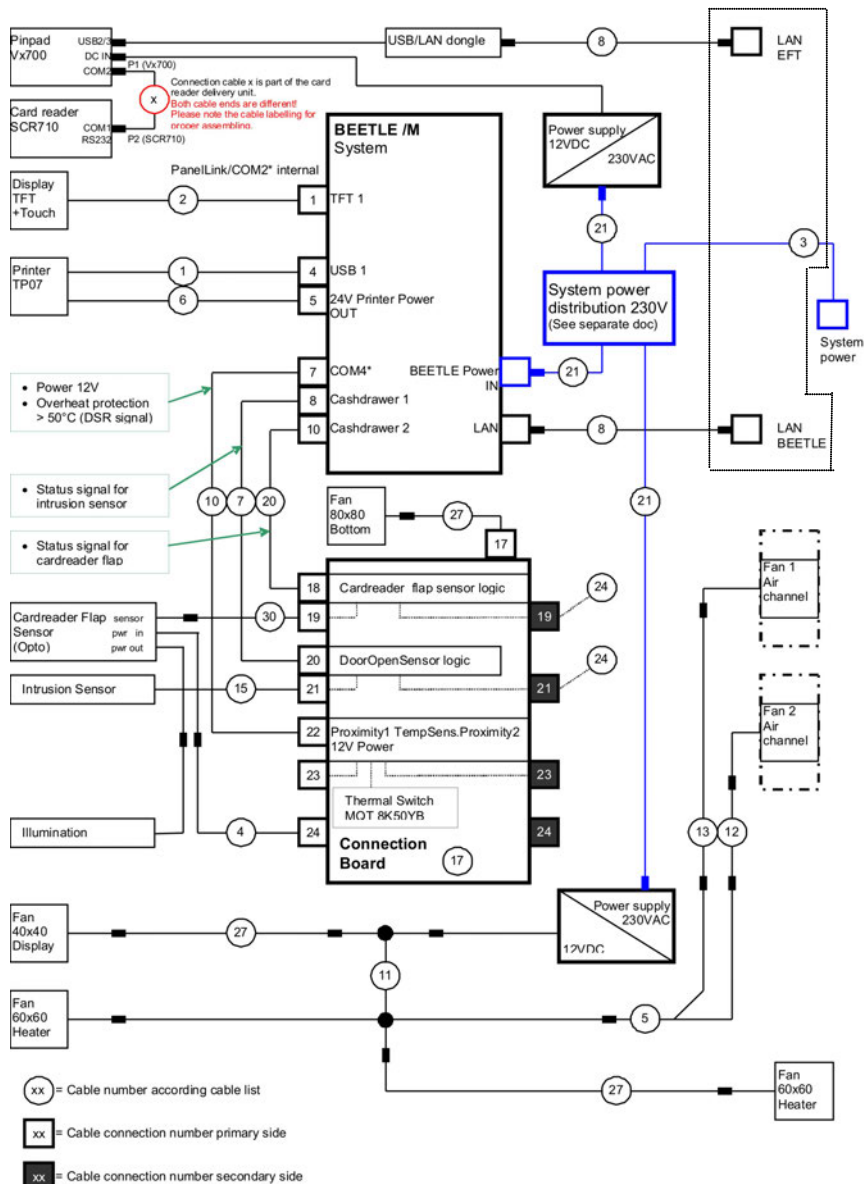
The temperature specification of the FST itself has to keep at -20 °C to +45 °C.

For a fan exchange in case of service (fan damage) on both sides unlock two screws and pull out the fan holders.

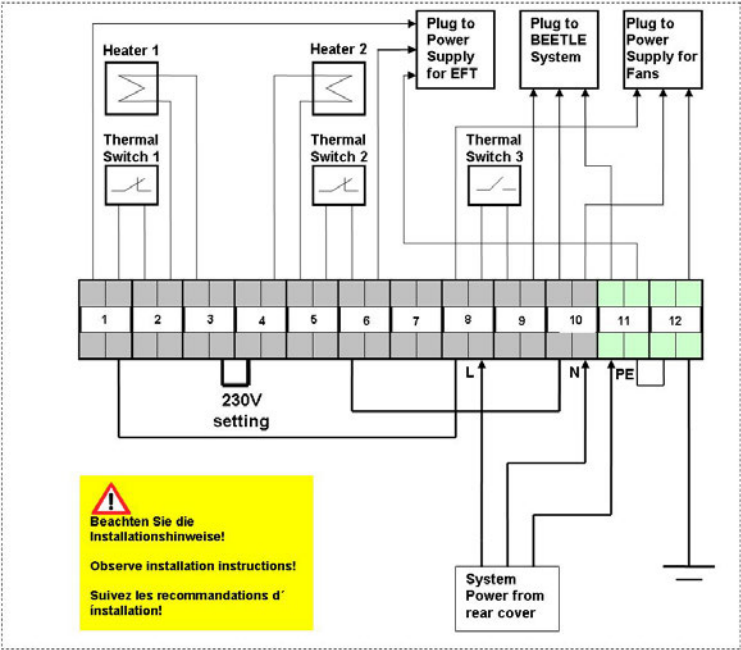


The FST has to be installed outside the zones 1 (explosive) and 2.

Block Diagram



Cabling Diagram for the Cable Distributor

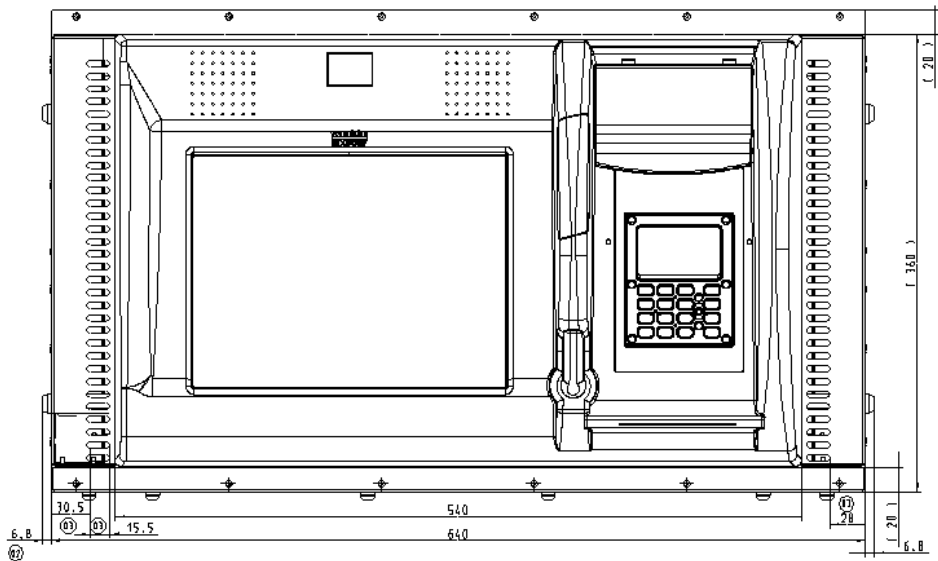


Additional Technical Data

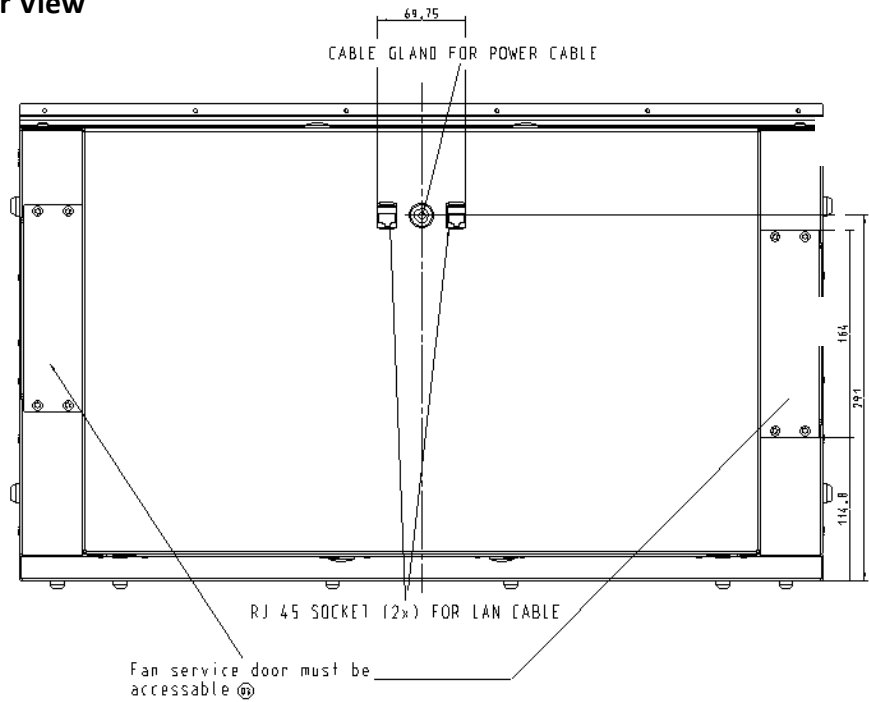
Computer System	Wincor Nixdorf BEETLE /M
	F2 STD motherboard
	INTEL Celeron -M 1.5 GHz;
	1GB RAM
	COM3* / COM4* module
	3.5'' SATA HDD (standard capacity)

Dimensions

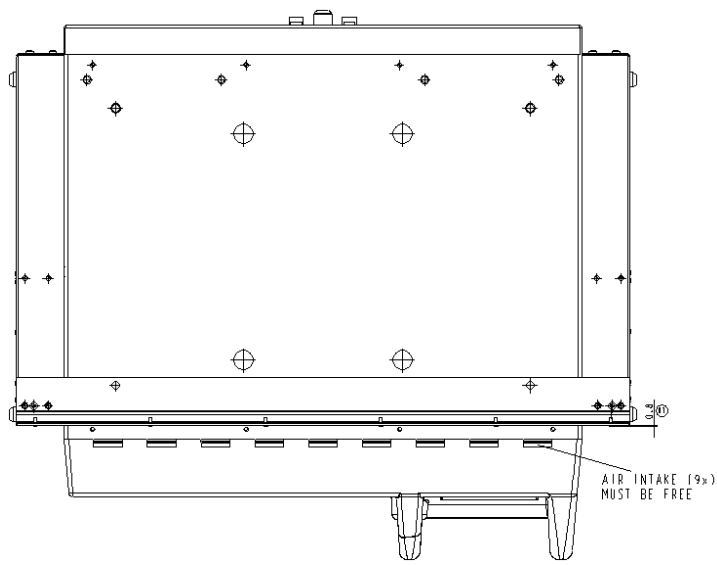
Front View



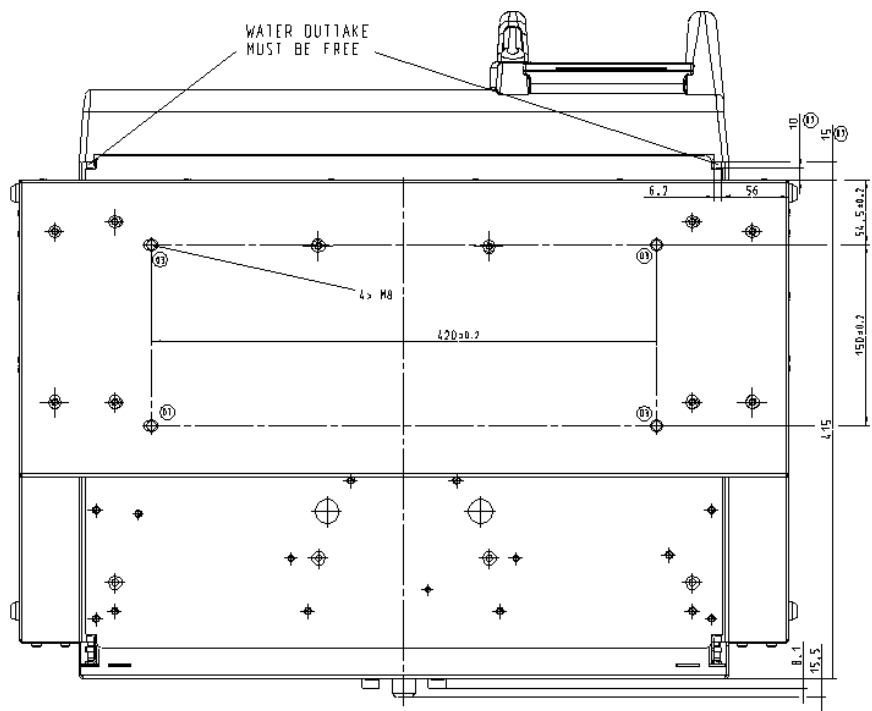
Rear View



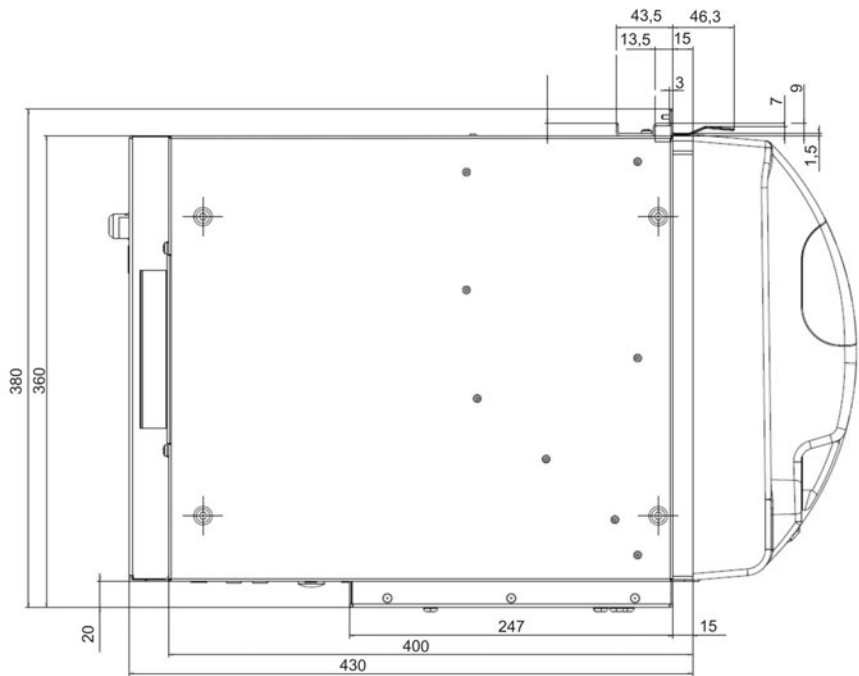
Top View



Bottom View



Side View



NAMOS paylane media Version with wireless EFT Preparation for Verifone Xplorer Device

(Optionally the EFT cover can be unhinged)



You can store the EFT flap on the right hand side of the housing.



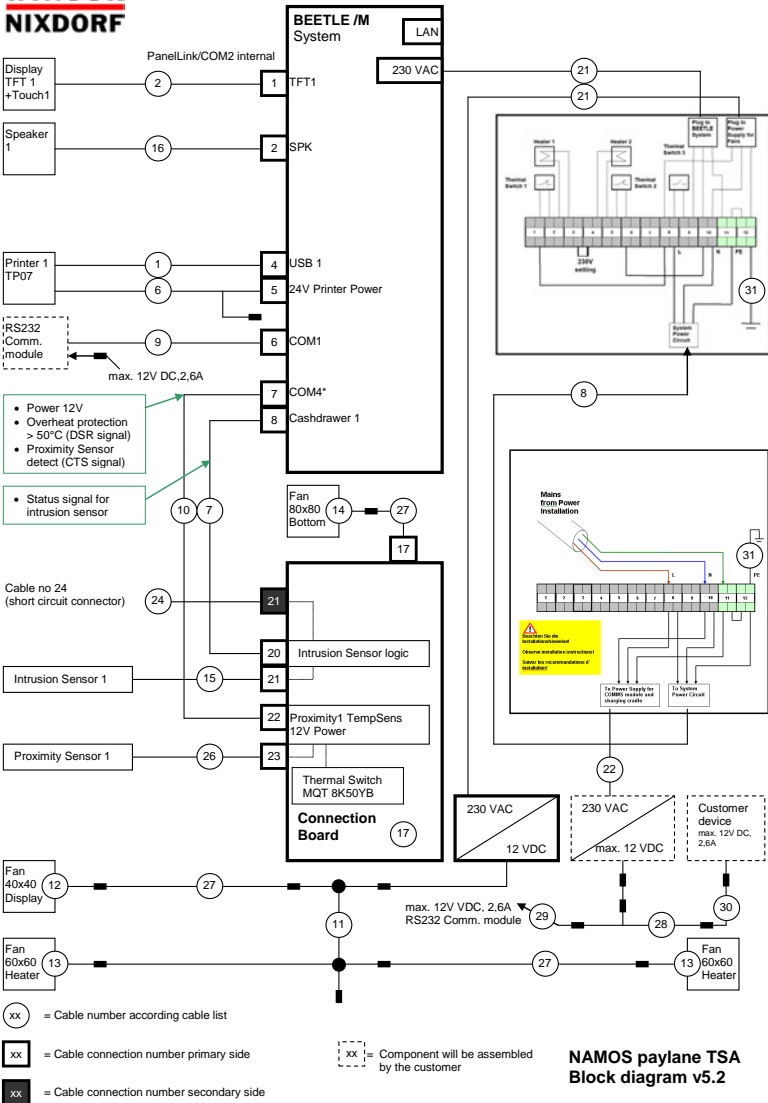
When reinserting the flap to the front side make sure that the upper bolts fit into the guidance until the stop. Not to do so will cause damages.



The approval IP44 is only fulfilled when the device is used with an installed flap.

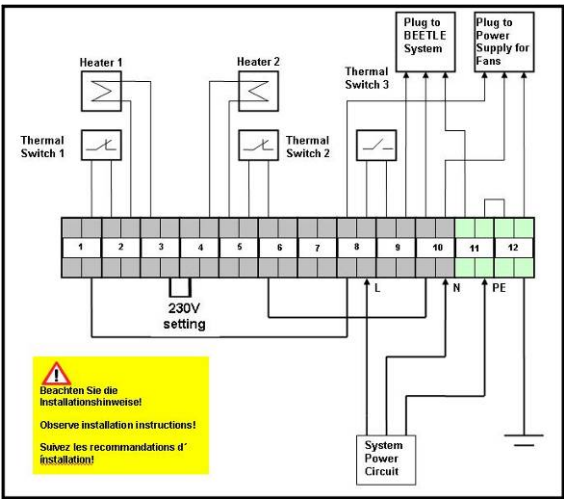
Block Diagram / Cable Connections

**WINCOR
NIXDORF**

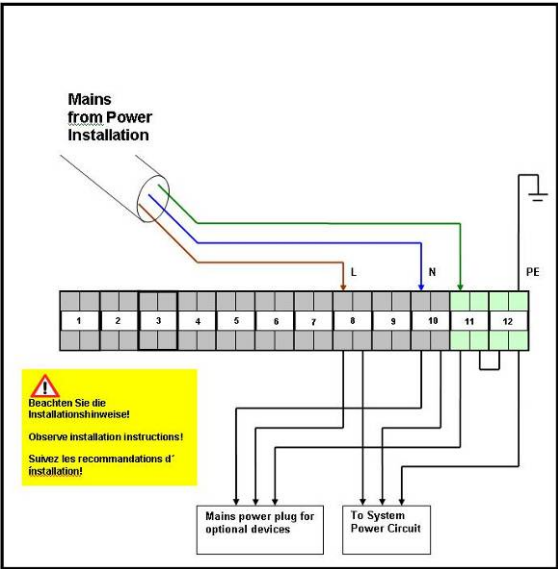


**NAMOS paylane TSA
Block diagram v5.2**

Cabling Diagram (Cable Distributor)



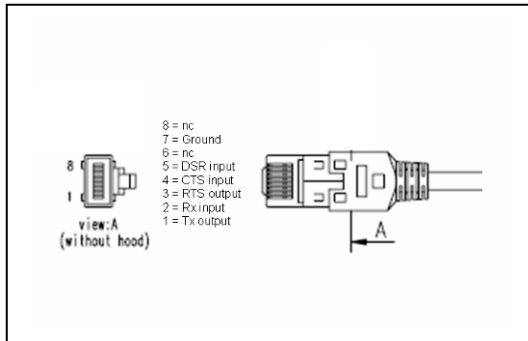
Cabling Diagram (Wire Box)



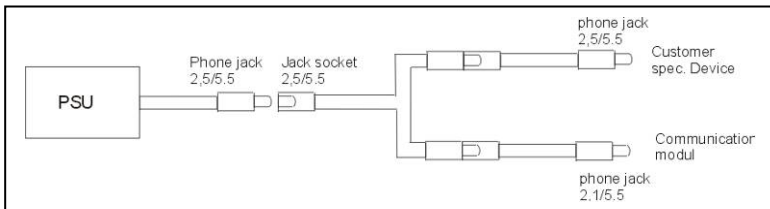
Preinstalled Cable

A RJ45 cable is already installed inside the OPT device to connect a customer specific serial device to the BEETLE COM interface.

The device must comply with the pin assignment of the RJ45 cable.

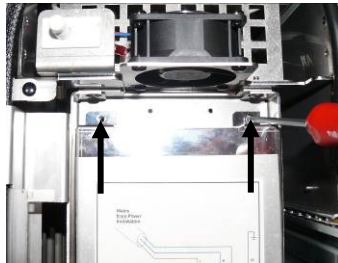


A Y-shaped power cable (DC/DC, max 12V, 2A) is also preinstalled in the OPT housing. The connected devices (PSU, customer spec. device, communication module) must comply with the following connector sizes.

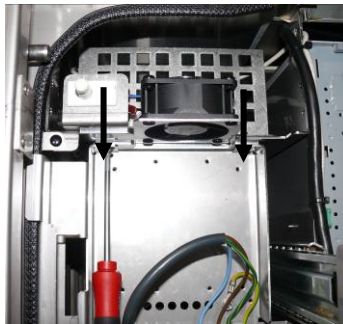


How to Integrate a PSU

Open the front cover and pull it out.
Remove the wire box on the lower left side in the housing.
Unscrew the metal cover sheet of the wire box (screw position see arrows).



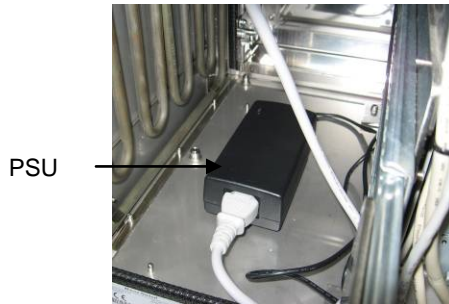
Remove the two screws from the wire box shown in the picture.



Tilt the box to the front.

Insert a PSU that comply with the preinstalled DC/DC power cable (max 12V, 2A). Fix The PSU with a double faced adhesive tape.

Connect the power out cable of the PSU with the preinstalled power cable.



Wind the cable and fix it with a cable binder on the right side opposite the heating.



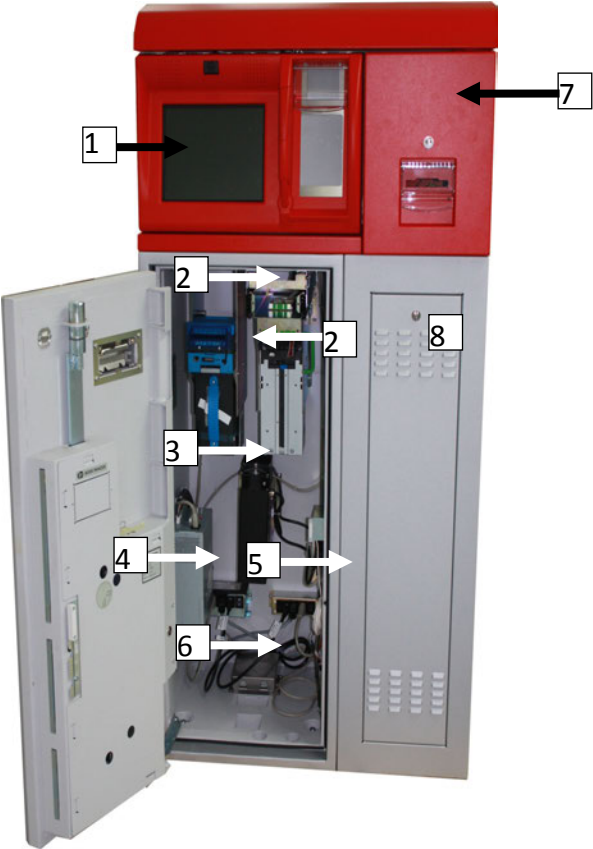
Connect the PSU with the voltage cable from the wire box.
Close the device following the previous steps in reverse order.

Cable Location

The preinstalled power and RJ45 cables are located on the backside of the front cover. The power cable is Y-shaped. One end is guided to the tray in front of the cover to connect a customer device. The other end together with the RJ45 cable will be connected to a communication module inside the cover.

NAMOS paylane media Cash

Components



1	OPT	3	Heating	5	Special Electronics	7	Printer
2	Note Validator	4	Power Supply	6	Connector Panel	8	Locker

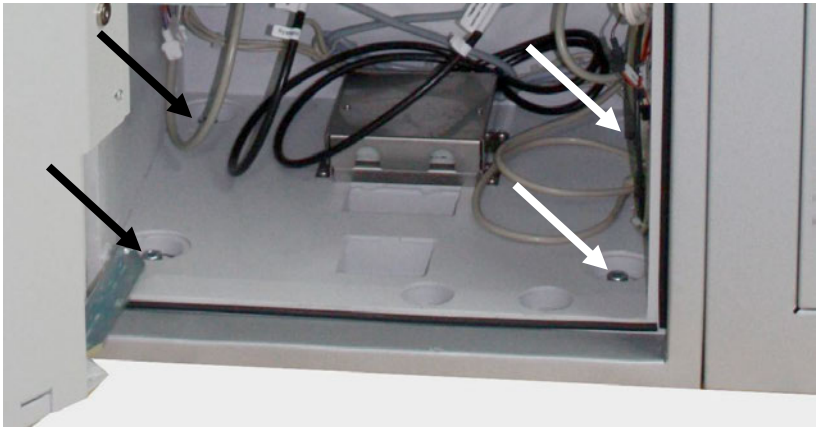
Removing the NAMOS paylane media cash from the Pallet

The NAMOS paylane media cash will be delivered on a pallet with a size in industry standard 1000mm x 1200mm.

First remove the wrapping paper.

Unlock and open the safe door.

Remove the four screws fixing the device on the pallet (see arrows).



Now remove the NAMOS paylane media cash from the pallet.
At least two persons are required.



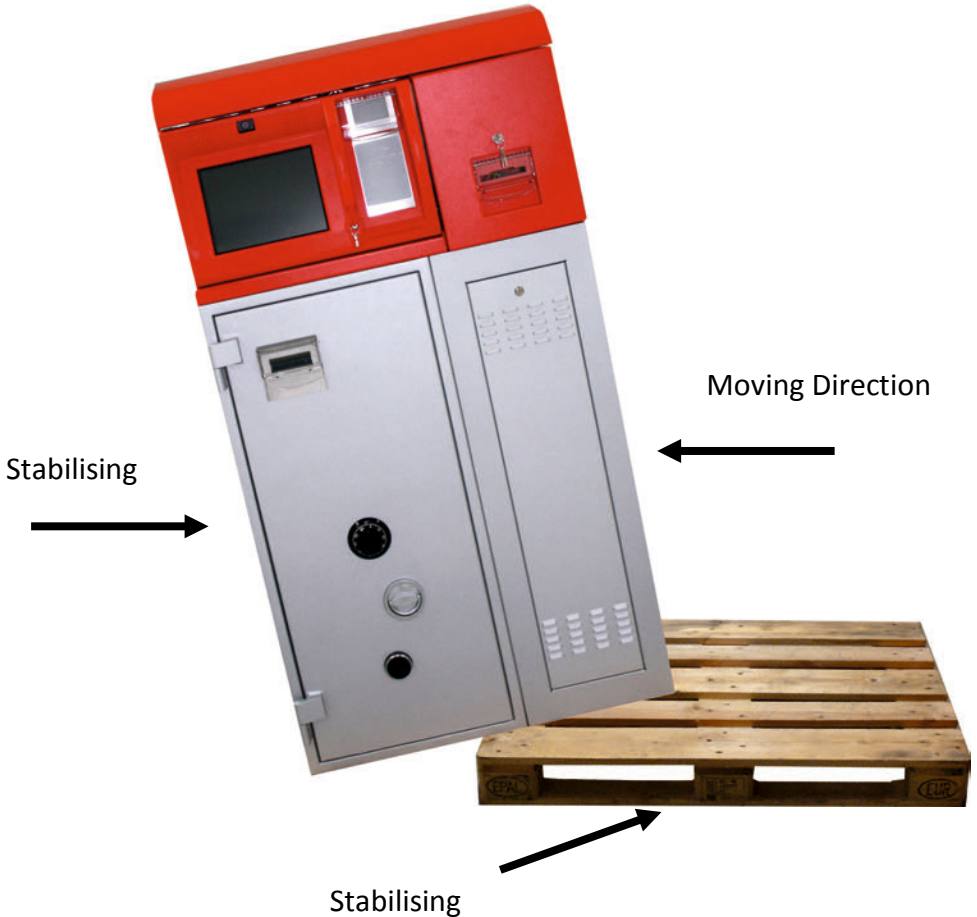
Caution! Always wear safety gloves and safety shoes with steel toe caps while transporting heavy appliances.

Move the device sideways from the pallet (**safe first**). Make sure to safeguard the NAMOS paylane media cash against toppling over.





Caution! Tilt the device (max. 15°) very carefully at the edge of the pallet and set it up at the designated site. Ensure that the installation site has the required load-carrying capacity.



Fixing the Device at the floor

i

Installation on raised or cavity flooring as well as on floating screed is not admissible according to CEN standard.

If the mounting structure differs from the one described below (see illustration - Mounting structure for CEN safe), it must be approved by the insurer.

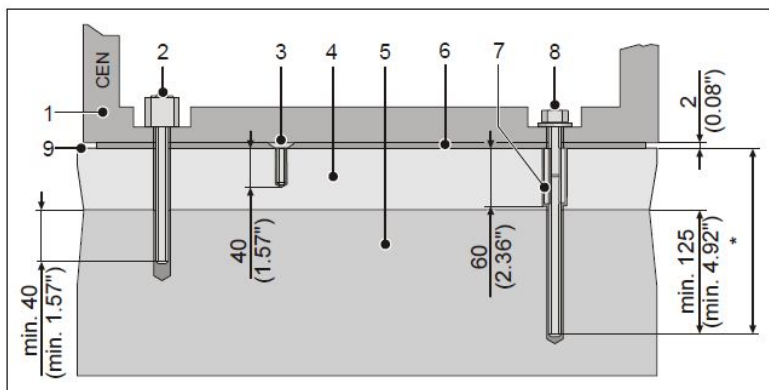
To ensure the safe does not become detached, the safe anchors must be secured in the concrete foundation.

The drilled holes for the safe anchors must be at least 125 mm (4.92") deep in the concrete foundation (see illustration below). For the hole diameter please refer to the mounting instructions of the caulking cartridge.

During the installation of a CEN safe, you have to drill the bore holes for the mounting of the safe:

- Hole diameter: 30 mm (1.18")
- Drilling depth 60 mm (2.36")

The drilled hole in the concrete foundation must have a depth of at least 40 mm (1.57") for the tear-off sensor (see illustration below). Consult your alarm technician about the size of the hole and the fixing.

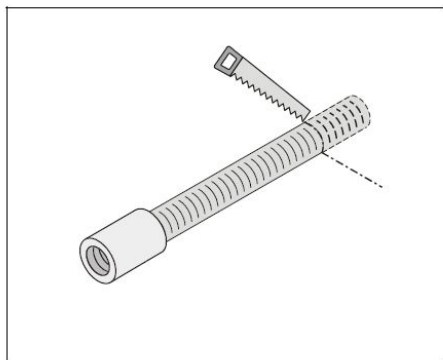


- | | |
|-------------------------------------|---------------------------------|
| 1 Safe | 6 Installation frame |
| 2 the tear-off sensor | 7 Safe anchor |
| 3 Mounting screw for mounting plate | 8 Mounting screw for safe |
| 4 Screed | 9 Top surface of finished floor |
| 5 Concrete | |

* The overall drilling depth depends on the constructional situation.

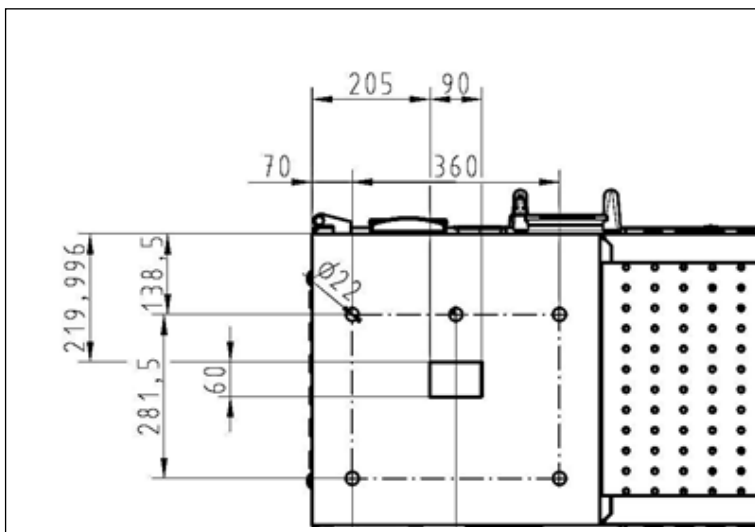
The safe anchor must be anchored at least 125 mm (4.92") in the load-bearing concrete.

If there are excess lengths, the safe anchors must be shortened accordingly on the side without the female thread (see illustration below).



Clean the bore holes as specified in the mounting instructions of the caulking cartridge.

Drill the four holes for mounting the safe and the hole for the tear-off sensor, if necessary (see following illustrations).



Set the save in position. Unlock and open the safe door of the NAMOS paylane media cash and fix it on the floor.

Connecting the System

Start up

The power supply system must be equipped with separately guided protective earth conductor (PE). This kind of electricity system is known as TN-S network. Do not use PEN conductors! Rating of NAMOS paylane media cash:
200 V-240 V, 50 Hz, 10 A



Caution! Check that the set nominal voltage of the appliance corresponds to the local mains voltage.

Power Connection and LAN Support

The NAMOS paylane media cash supports Ethernet 10/100 BASE-T local area network (LAN) communication protocol. The NAMOS paylane media cash terminal provides a female 3 m LAN cable inside the safe.

Unlock and open the safe door of the NAMOS paylane media cash. Find the connector panel at the bottom area (see arrow).



NAMOS paylane media

Disconnecting the System from the Mains

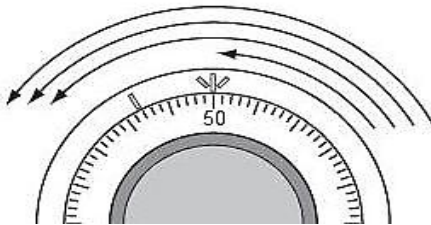
- Shut down the system by the software application.
- Unplug the power cable to separate the devices completely from the power supply.

Safe – First Opening with Dial and plastic Key

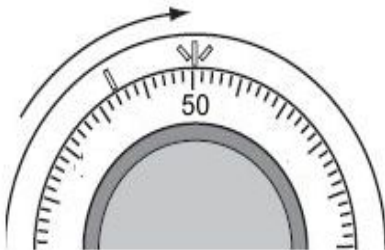


Turn dial slowly and evenly. Do not turn back to regain alignment if you rotate past number. If an error is made, re-dial entire combination. Do not count turns. Count how many times each number is aligned with the opening index (at the 12 o'clock position). Always view the dial and ring straight on, not at an angle.

- Turn dial left, aligning first number with the opening index the fourth time it comes to the index.



- Turn dial right until dial comes to a stop and then until it clicks.



- To relock and secure the combination lock, turn the dial to the left at least four revolutions.

Key changing Procedure

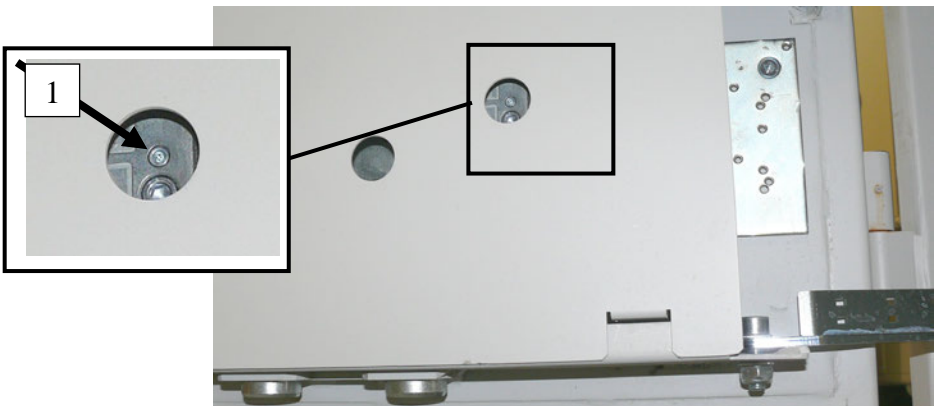


Keep the safe door open until the lock has been successfully changed to new keys and checked.

Never force the lock or key.

Always keep your key(s) in a safe place. If a key is lost or misplaced, change the lock to a new key as soon as possible, even if the original key is recovered.

- Open the safe door and extend the boltwork to the locked position. With the door open, turn the key counterclockwise to its stop, and remove it from the lock.
- Press the button (1) on the back of the lock and keep it depressed for next step.



- Insert the old key and turn it clockwise 180° until it reaches its stops. Release the button and remove the key.
- Insert the new key and turn it counterclockwise in the locked position. Remove the new key. Your lock is now set to the new key and the old key is no longer operable.

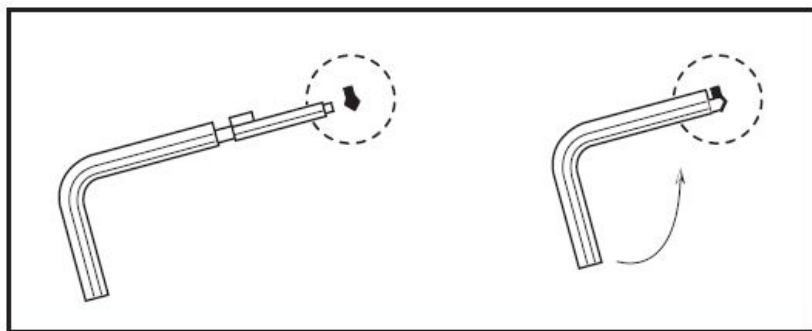
- Check the operation of the new key in your lock at least three times before closing the safe door.

Changing Number of Combination Lock



Important: You must have the correct change key. Do not set the third number of the combination between 5 and 11 on a lock with a dial splined at 50. The “forbidden zone” can shift slightly due to installation and tolerances, but will always be between 4 and 12. Do not set adjacent numbers of the combination within five numbers of each other. Do not remove lock cover. If an error is made, re-dial the entire combination.

- Using the existing combination on the opening index, unlock combination lock, and open safe door. Relock lock with safe door open.
- Dial the existing combination again, using the changing index (at the 11 o'clock position). Keep the third number aligned on the changing index.
- Insert change key into key hole on the lock's cover (see picture below). Change key must be completely inserted. Rotate key left 90 degrees.



- Enter a new three number combination using the changing index, dialing as follows:
Turn dial left until the first new number aligns with the changing index the fourth time.
- Turn dial right until the second new number aligns with the changing index the third time.
- Turn dial left until the third new number aligns with the changing index the second time.
- Turn the dial right ten numbers.
- Rotate change key right 90 degrees until it stops. Remove change key.
- Using the opening index, check new combination at least three times.

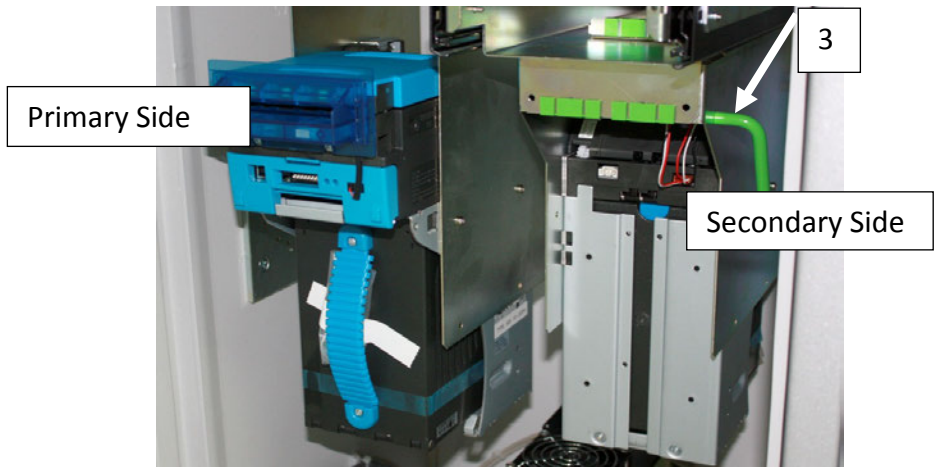
After changing the opening code, the lock should be opened and locked several times with the safe door open.



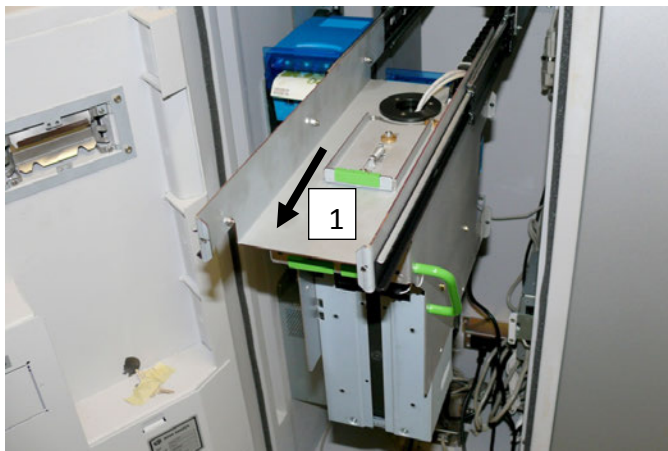
Do not select codes such as birthdays or other predictable data which could give a correlation between the user and the opening code.

Removing the Note Cassette/Note Validator

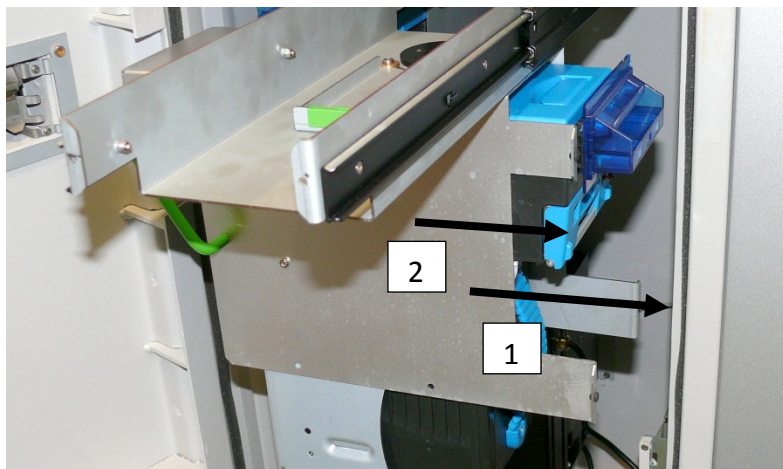
Open the safe door. To remove components from the secondary side grab on the green lever (3) and pull out the carrier with the note cassette and the note acceptor completely.



Unlock the carrier (1) ...



...and turn it to the left. Remove the cassette forward (1). Grab the grey lever (2) at the note validator and remove it forwards (same procedure at the primary side).



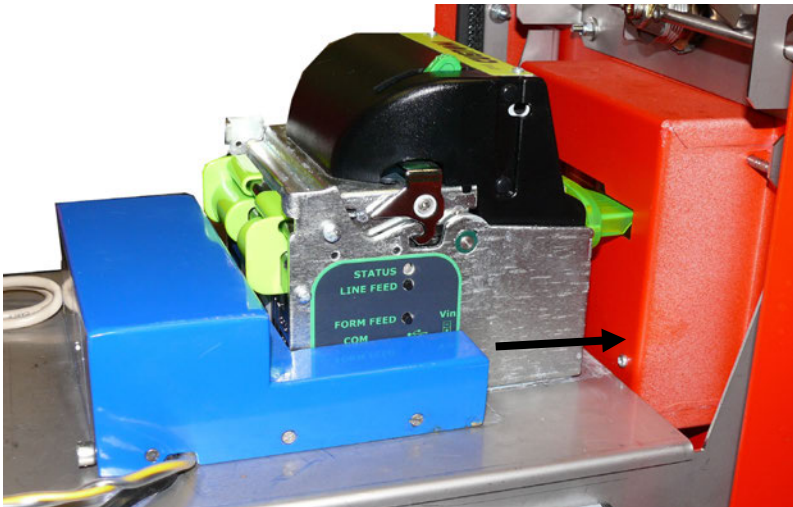
Mount the device in reverse order.

Installing the MF Printer pay VKP80

Unlock and open the housing to install the MF printer.



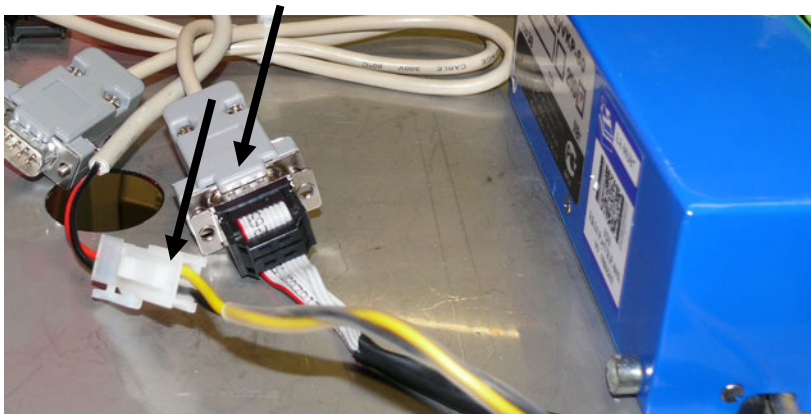
Set the printer in position.



Install the printer from below with two M4 screws.



Plug the cables for printer 1 (primary side to COM3 and the power cable). Close the device.

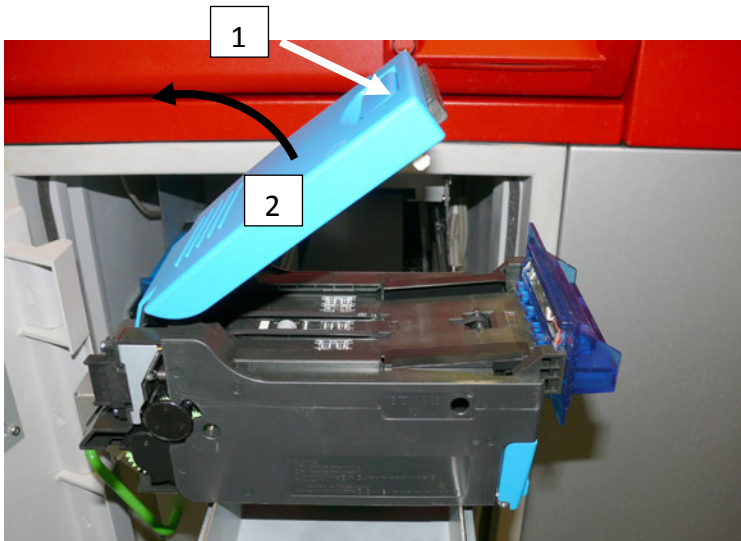


The printer for the secondary side will be connected with COM 7.

Cleaning the Note Validators

Always clean both note validators.

Remove the note validator (see also Removing the Note Validator). Grab at the blue lever (1) and open it. Clean the note validator and mount it again.



Cleaning Instructions

- Always **turn off the system** before cleaning.
- The glass surface of your 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.

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

Maintenance and Service

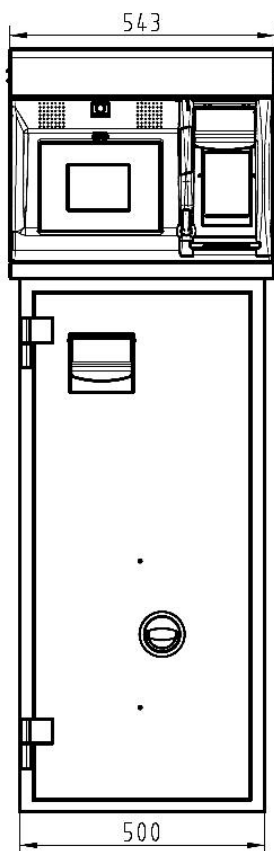
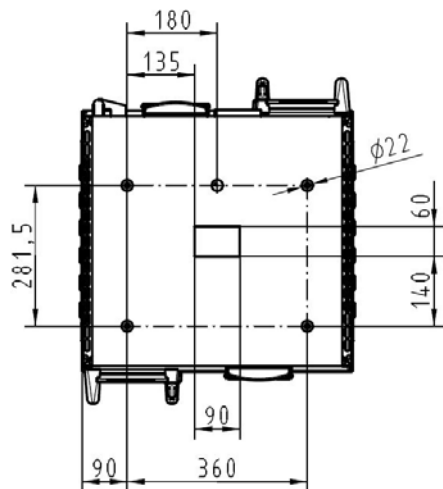
When carrying out work on the components and modules that carry an electrical charge, this equipment must first be disconnected from the power supply. Besides switching off the power switch on the power distributor, the safety plug must be disconnected from the power distributor.

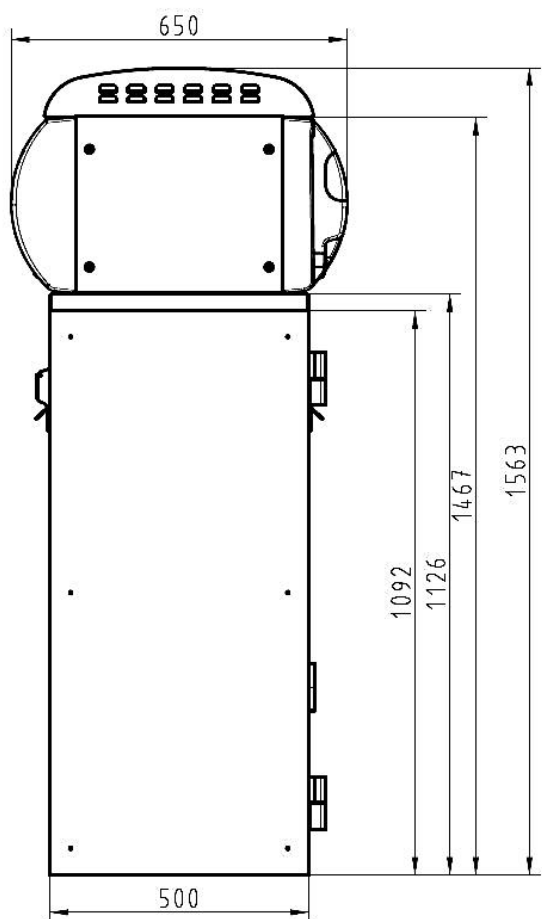
Housing

Clean the housing with a vacuum cleaner or cloth. Eliminate damage to paint if necessary and possible.

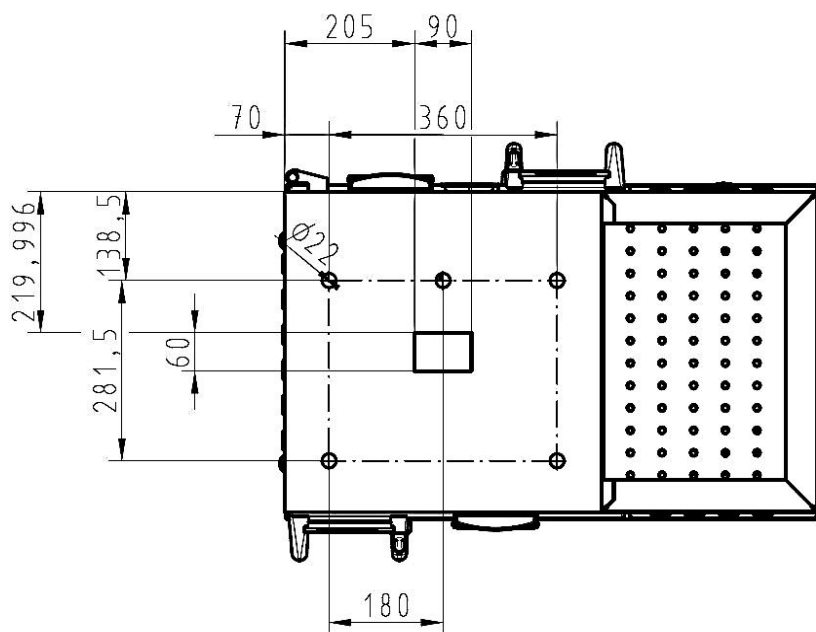
Dimensions (in mm)

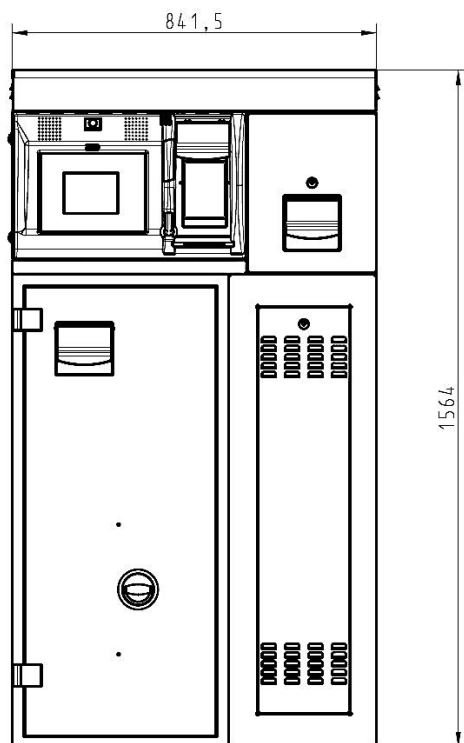
NAMOS paylane media cash – Standard Version

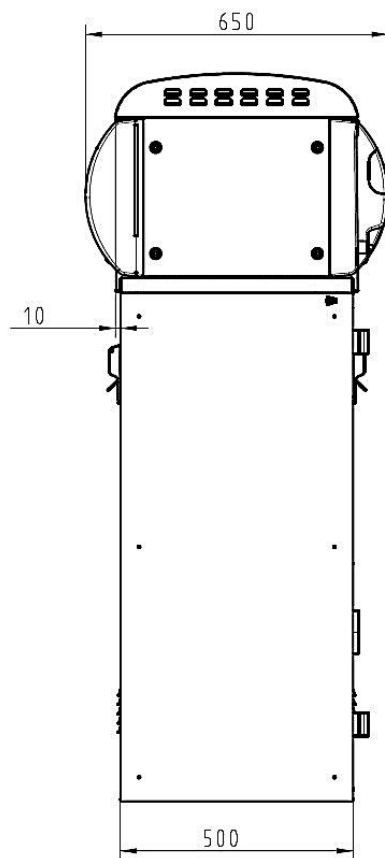


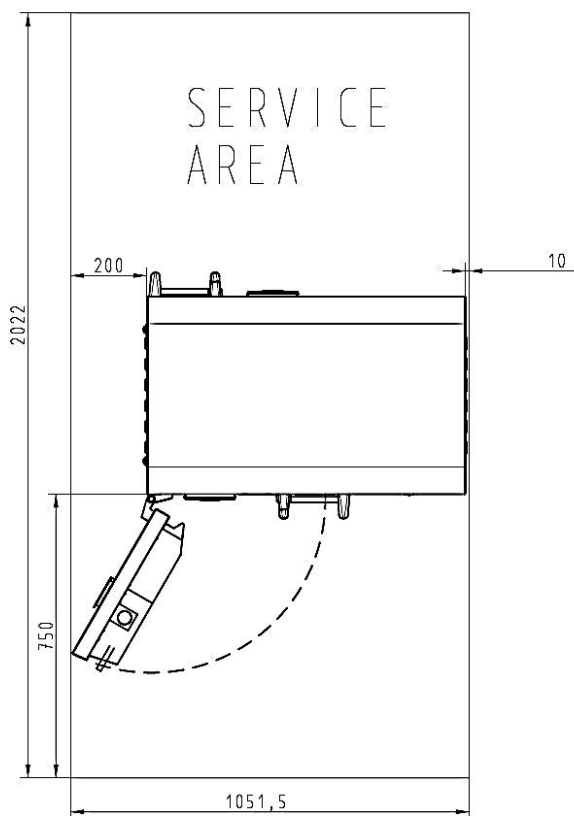


NAMOS paylane media cash – Extended Version

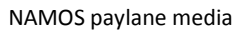








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Important Notes

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



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.

- The NAMOS paylane media has been developed for a total flexibility in use at petrol stations.
- The NAMOS paylane media must be installed outside the explosive risk zones in a petrol station environment. The system is available as a single or double sided, stand alone or pump retrofitted unit and as a payment terminal for car wash. The operational area of the NAMOS paylane media is outside. Therefore, the housing is protected against rain (IP44), coldness (heating) and moisture.
- The NAMOS paylane media has been provided with the symbol for “Tested Safety”. Make sure to meet the stipulations of the norm “EN 13617-1” when installing the NAMOS paylane media!
- The NAMOS paylane media can be mounted (with an adapter) to all current petrol pumps. The NAMOS paylane media housing has an ergonomically design and is vandal-proof. Service and logistics personnel have direct access for changing spare parts. The housing is lockable to prevent unauthorized access.

- The system is qualified for a temperature range of –20 °C to +45 °C, optional -40 °C to +45 °C in the shadow. It must not be operated in altitudes above 2000 m (6562 ft AMSL).
- The NAMOS paylane media is used in many countries and Wincor Nixdorf will deliver country-specific configurations, thus meeting the requirements of our customers.
- The installation of the NAMOS paylane media has to comply fully with the specific petrol station legislation requirements described in this section.
- Installation of the NAMOS paylane media has to be made in accordance with the Petrol pump environment.
- The NAMOS paylane media has strictly to be installed in non explosive areas.
- Suction of cooling air from EX areas is prohibited. Injection of cooled air into an EX area is also prohibited.
- The NAMOS paylane media is provided with a top plate which covers those slots for the air suction next to zone 2. Depending on the installation the top plate can be turned so that the coverage is on the right or left hand side.
- The base plate of the NAMOS paylane media provides an opening as outlet for the air. The plate can be mounted for a right or left blowing direction, depending on the requirements.
- Install the NAMOS paylane media in a way that no direct solar radiation on the display may occur. Direct solar radiation will heat up the display and may cause a black screen.
- The height for operating devices must not exceed 1.38 meter according to the needs of handicapped people.
- The NAMOS paylane media must not be exposed to conductive dust.

- The installation of the NAMOS paylane media has to be carried out or supervised by authorized qualified personnel with profound knowledge of explosion protection.
- Installation dimensions having to be followed may vary from country to country. Therefore, it is mandatory to meet these country specific laws and regulations.
- The electrical installation in the building / fuse box has to provide a separator to completely disconnect the NAMOS paylane media from the system voltage.
- Both electrical circuits (for the heating and the system) have to be disconnected for a complete disconnection of the system voltage.
- The value for an UPS device (BEETLE, 2 displays, 2 printers) must be at least 200W.
- After a rapid shut down at 50 °C wait for about 30 minutes. Then turn off the switch of the power supply at the rear side of the BEETLE and switch it on again.
- NAMOS paylane media must not be cleaned with a high pressure cleaner!

