

USER MANUAL

KPM302III

TK202III

TK302III

CUSTOM[®]

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UNLESS OTHERWISE SPECIFIED, THE INFORMATION GIVEN IN THIS MANUAL ARE REFERRED TO ALL MODELS IN PRODUCTION AT THE ISSUE DATE OF THIS DOCUMENT.

GENERAL INSTRUCTIONS

CUSTOM S.p.A. declines all responsibility for accidents or damage to persons or property occurring as a result of tampering, structural or functional modifications, unsuitable or incorrect installations, environments not in keeping with the equipment's protection degree or with the required temperature and humidity conditions, failure to carry out maintenance and periodical inspections and poor repair work.

GENERAL SAFETY INFORMATION

Your attention is drawn to the following actions that could compromise the characteristics of the product:

- Read and retain the instructions which follow.
- Follow all indications and instructions given on the device.
- Make sure that the surface on which the device rests is stable. If it is not, the device could fall, seriously damaging it.
- Make sure that the device rests on a hard (non-padded) surface and that there is sufficient ventilation.
- Do not fix indissolubly the device or its accessories such as power supplies unless specifically provided in this manual.
- When positioning the device, make sure cables do not get damaged.
- [Only OEM equipment] The equipment must be installed in a kiosk or system that provides mechanical, electrical and fire protection.
- The mains power supply must comply with the rules in force in the Country where you intend to install the equipment.
- Make sure that there is an easily-accessible outlet with a capacity of no less than 10A closely to where the device is to be installed.
- Make sure the power cable provided with the appliance, or that you intend to use is suitable with the wall socket available in the system.
- Make sure the electrical system that supplies power to the device is equipped with a ground wire and is protected by a differential switch.
- Before any type of work is done on the machine, disconnect the power supply.
- Use the type of electrical power supply indicated on the device label.
- These devices are intended to be powered by a separately certified power module having an SELV, non-energy hazardous output. (IEC60950-1 second edition).
- [Only POS equipment] The energy to the equipment must be provided by power supply approved by CUSTOM S.p.A.
- Take care the operating temperature range of equipment and its ancillary components.
- Do not block the ventilation openings.
- Do not insert objects inside the device as this could cause short-circuiting or damage components that could jeopardize printer functioning.
- Do not carry out repairs on the device yourself, except for the normal maintenance operations given in the user manual.
- The equipment must be accessible on these components only to trained, authorized personnel.
- Periodically perform scheduled maintenance on the device to avoid dirt build-up that could compromise the correct, safe operation of the unit.
- Do not touch the head heating line with bare hands or metal objects. Do not perform any operation inside the printer immediately after printing because the head and motor tend to become very hot.
- Use consumables approved by CUSTOM S.p.A.



THE CE MARK AFFIXED TO THE PRODUCT CERTIFY THAT THE PRODUCT SATISFIES THE BASIC SAFETY REQUIREMENTS.

The device is in conformity with the essential Electromagnetic Compatibility and Electric Safety requirements laid down in Directives 2014/30/EU and 2014/35/EU inasmuch as it was designed in conformity with the provisions laid down in the following Standards:

- EN 55032 (*Electromagnetic compatibility of multimedia equipment - Emission Requirements*)
- EN 55024/EN55035 (*Electromagnetic compatibility of multimedia equipment - Immunity requirements*)
- EN IEC/EN62368-1 (*Audio/video, information and communication technology equipment*)

The device is in conformity with the essential requirements laid down in Directives 2014/53/EU about devices equipped with intentional radiators. The Declaration of Conformity and other available certifications can be downloaded from the site www.custom4u.it.



GUIDELINES FOR THE DISPOSAL OF THE PRODUCT

The crossed-out rubbish bin logo means that used electrical and electronic products shall NOT be mixed with unsorted municipal waste. For more detailed information about recycling of this product, refer to the instructions of your country for the disposal of these products.

- Do not dispose of this equipment as miscellaneous solid municipal waste, but arrange to have it collected separately.
- The re-use or correct recycling of the electronic and electrical equipment (EEE) is important in order to protect the environment and the wellbeing of humans.
- In accordance with European Directive WEEE 2012/19/EU, special collection points are available to which to deliver waste electrical and electronic equipment and the equipment can also be handed over to a distributor at the moment of purchasing a new equivalent type.
- The public administration and producers of electrical and electronic equipment are involved in facilitating the processes of the re-use and recovery of waste electrical and electronic equipment through the organisation of collection activities and the use of appropriate planning arrangements.
- Unauthorised disposal of waste electrical and electronic equipment is punishable by law with the appropriate penalties.
- For the waste sorting of the packaging materials, please check the local waste disposal laws.



The format used for this manual improves use of natural resources reducing the quantity of necessary paper to print this copy.



FCC STATEMENT
(FEDERAL COMMUNICATIONS
COMMISSIONS).

This note is valid only for device bringing FCC
trademark.

This device complies with Part 15 of the FCC
Rules. Operation is subject to the following
conditions:

The devices may not cause harmful interference.
The devices must accept any interference
received, including interference that may cause
undesired operation.

NOTE: This equipment has been tested and
found to comply with the limits for a Class B digital
device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable
protection against harmful interference in a
residential installation. This equipment generates,
uses and can radiate radio frequency energy
and, if not installed and used in accordance with
the instructions, may cause harmful interference
to radio communications. However, there is no
guarantee that interference will not occur in a
particular installation. If this equipment does
cause harmful interference to radio or television
reception, which can be determined by turning the
equipment off and on, the user is encouraged to
try and correct the interference by one or more
of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment
and receiver.

Connect the equipment into an outlet on a
circuit different from that to which the receiver
is connected.

Consult the dealer or an experienced radio/TV
technician for help.

Modifications to this product not authorized by
CUSTOM S.p.A. could void the FCC & Industry
Canada regulations and negate your authority to
operate the product.



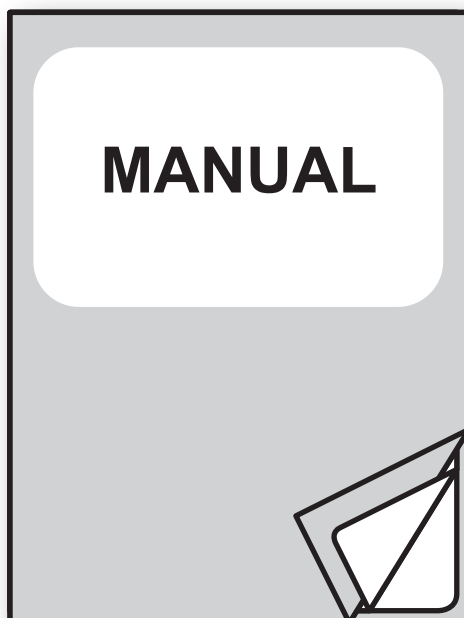
This product meets the ENERGY STAR®
guidelines for energy efficiency.

For more information about ENERGY STAR®,
visit www.energystar.gov.

This note is valid only for device bringing
ENERGY STAR® trademark.

This Class B digital apparatus complies with
Canadian ICES-003.

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



For details on the commands,
refer to the manual with code **77200000005100**

For details about using of tool "PrinterSet",
refer to the manual with code **78200000001800**.

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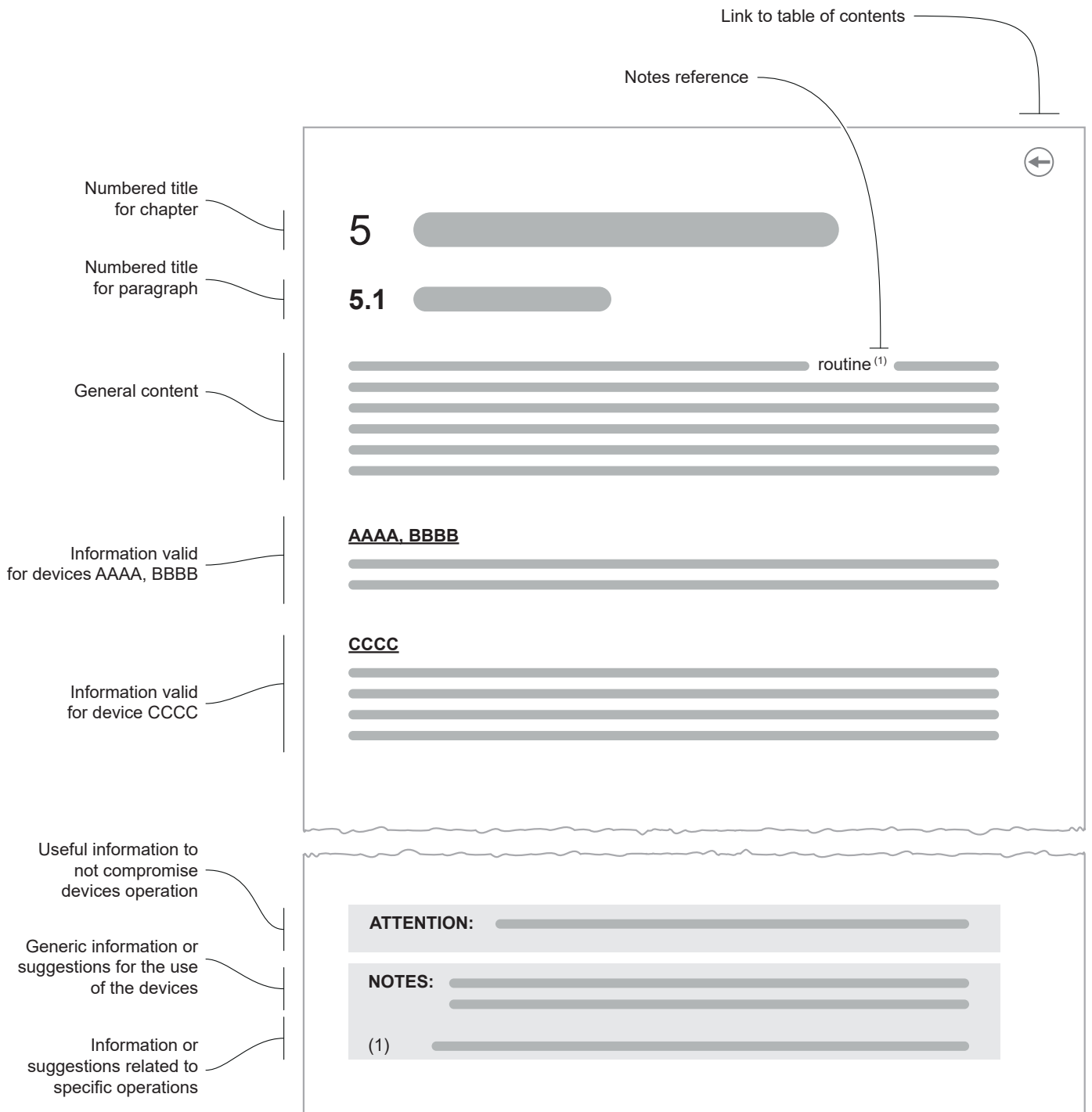
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1 INTRODUCTION

This document is divided into sections and chapters. Each chapter can be reached by the index at the beginning of this document. The index can be reached by the button on each page as shown in the diagram below.







2 IDENTIFICATION OF THE MODELS

NOMENCLATURE	DESCRIPTION
KPM302III	KPM302 base configuration (OEM model with 200 dpi print head)
KPM302III EJ	KPM302 with ejector group
KPM302III vSEL	KPM302 with selector group for vertical fixing
KPM302III hSEL	KPM302 with selector group for horizontal fixing
KPM302III TF	KPM302 with triple feeder
KPM302III TF-EJ	KPM302 with triple feeder and ejector group
KPM302III TF-hSEL	KPM302 with triple feeder and selector group for horizontal fixing
TK202III	TK202 base configuration (TKT model with 200 dpi print head)
TK302III	TK302 base configuration (TKT model with 200 dpi print head)
TK302III TF	TK302III with triple feeder



3 DESCRIPTION

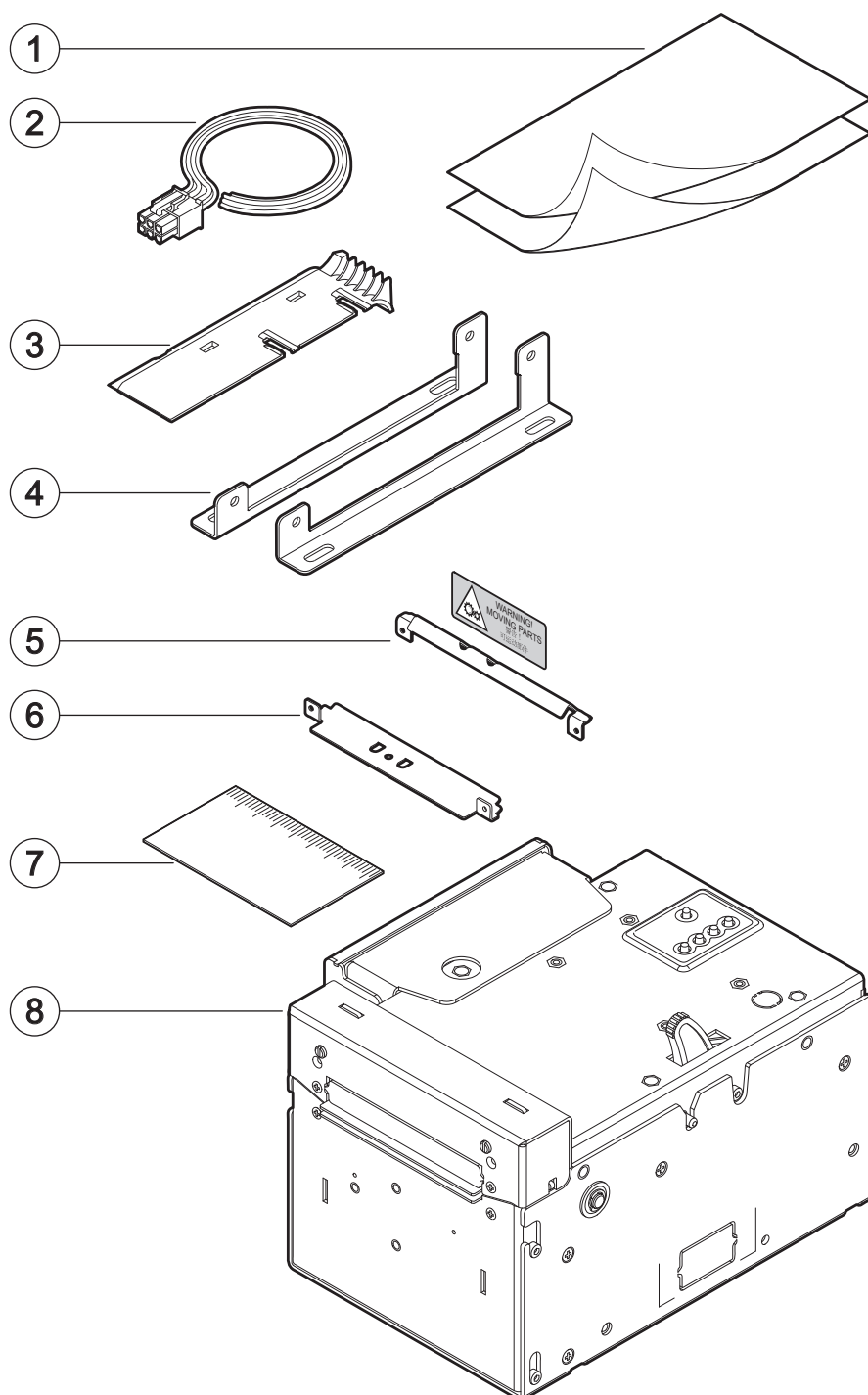
3.1 Box contents

Remove the device from its carton being careful not to damage the packing material so that it may be re-used if the device is to be transported in the future.

Make sure that all the components illustrated below are present and that there are no signs of damage. If there are, contact the customer service.

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL

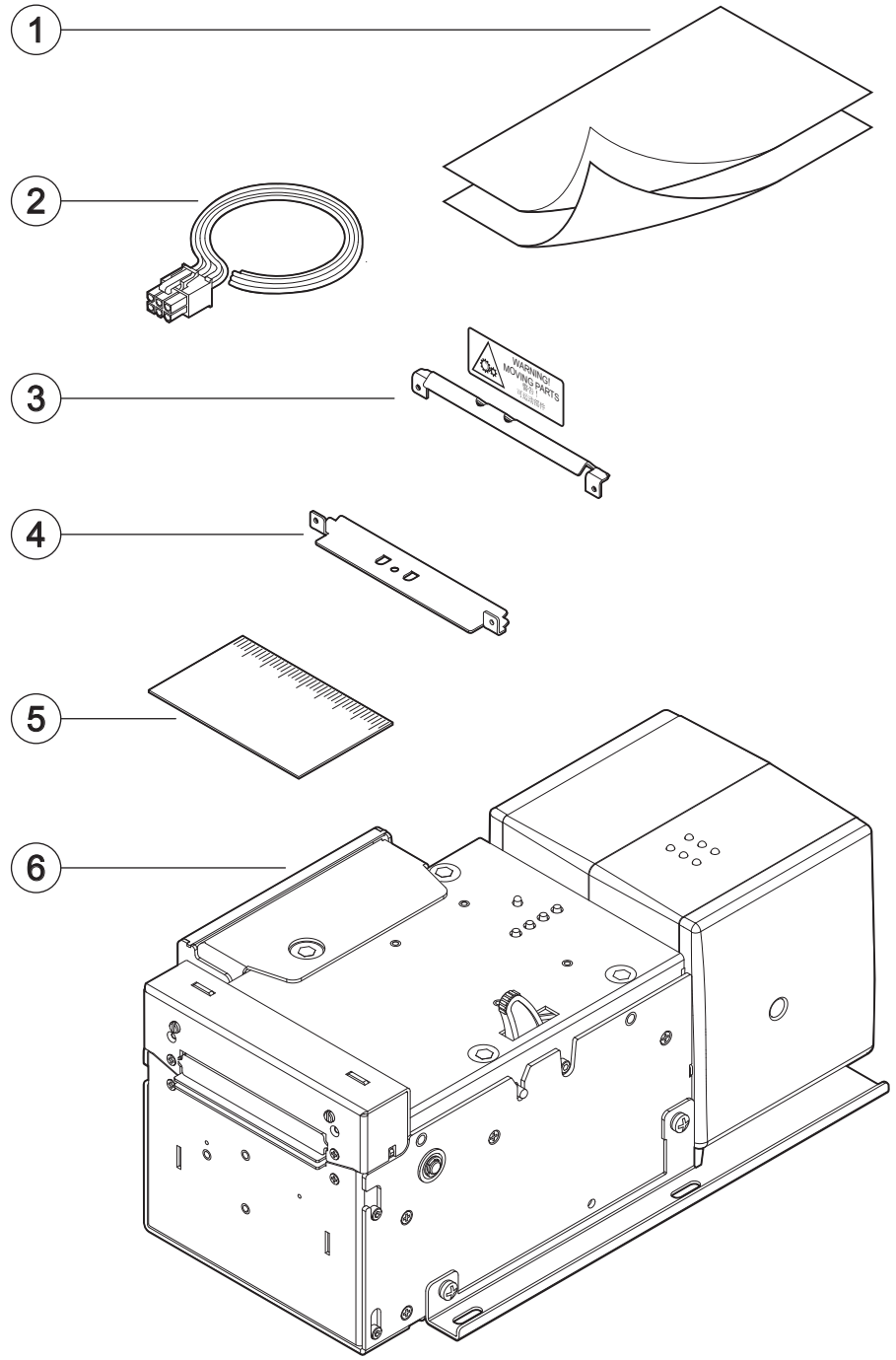
1. Documentation
(installation instruction sheet)
2. Power supply cable
3. Spacer for paper width < 40 mm
(only for KPM302III)
4. Additional fixing bracket
5. CUT&DROP configuration kit
(only for KPM302III, -
for installation, see [paragraph 4.4](#))
6. BURSTER configuration kit
(only for KPM302III, -
for installation, see [paragraph 4.3](#))
7. Ruler
8. Device





KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL

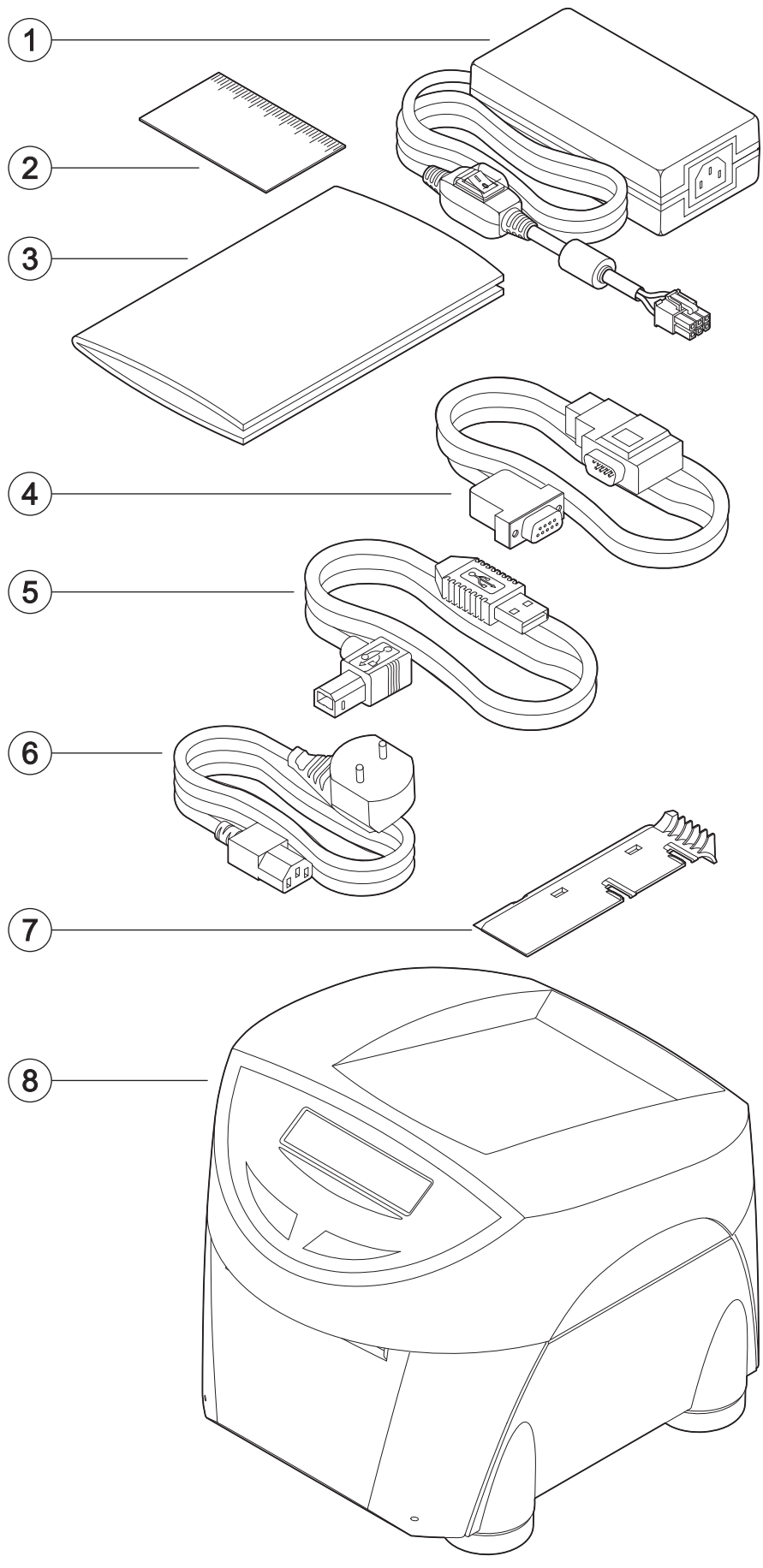
1. Documentation (installation instruction sheet)
2. Power supply cable
3. CUT&DROP configuration kit (only for KPM302III TF - for installation, see [paragraph 4.4](#))
4. BURSTER configuration kit (only for KPM302III TF - for installation, see [paragraph 4.3](#))
5. Ruler
6. Device





TK202III, TK302III

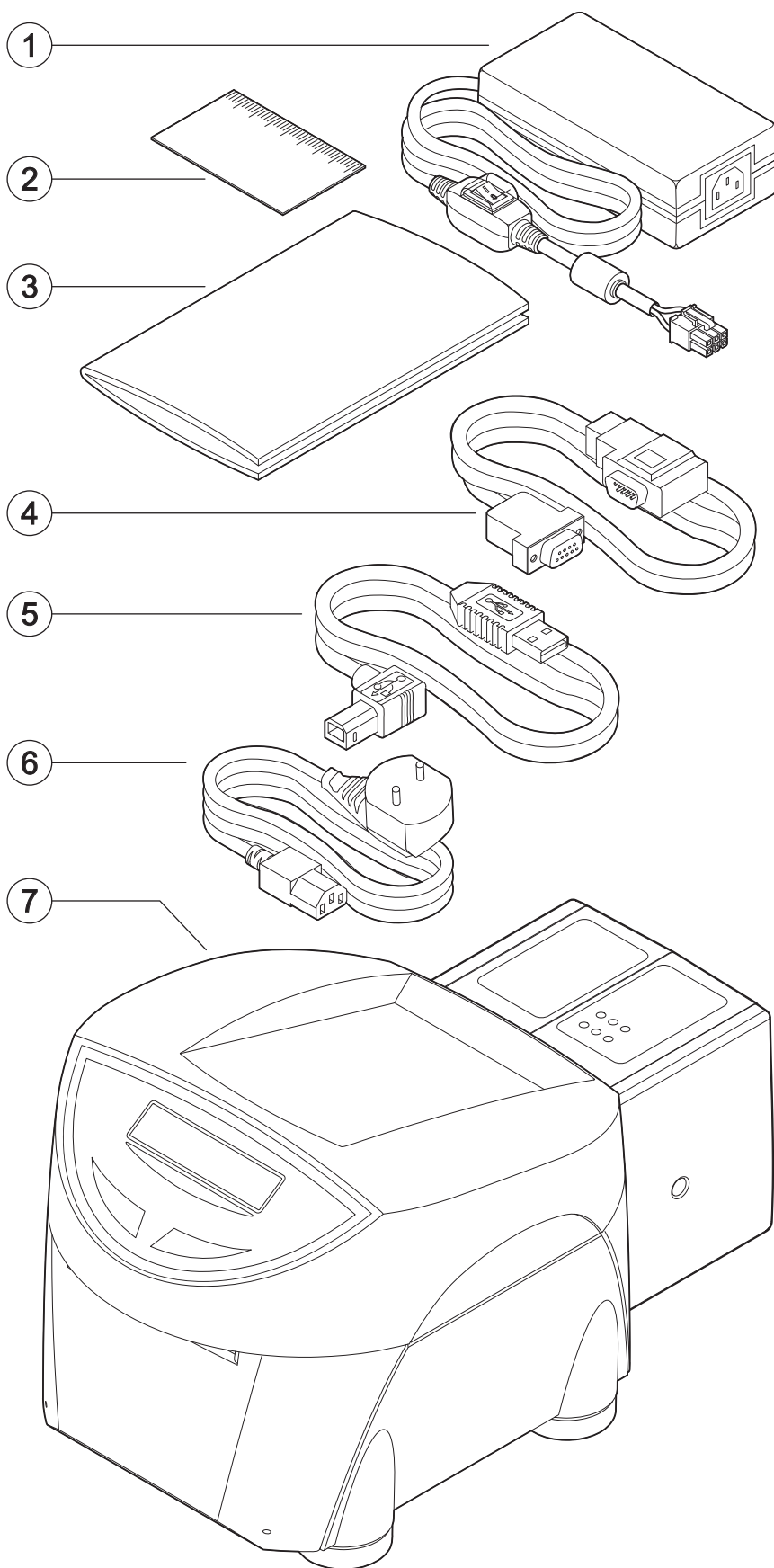
1. Power supply
2. Ruler
3. Documentation (short guide)
4. Serial cable
5. USB cable
6. Power supply cable 220V
7. Spacer for paper width < 40 mm
8. Device





TK302III TF

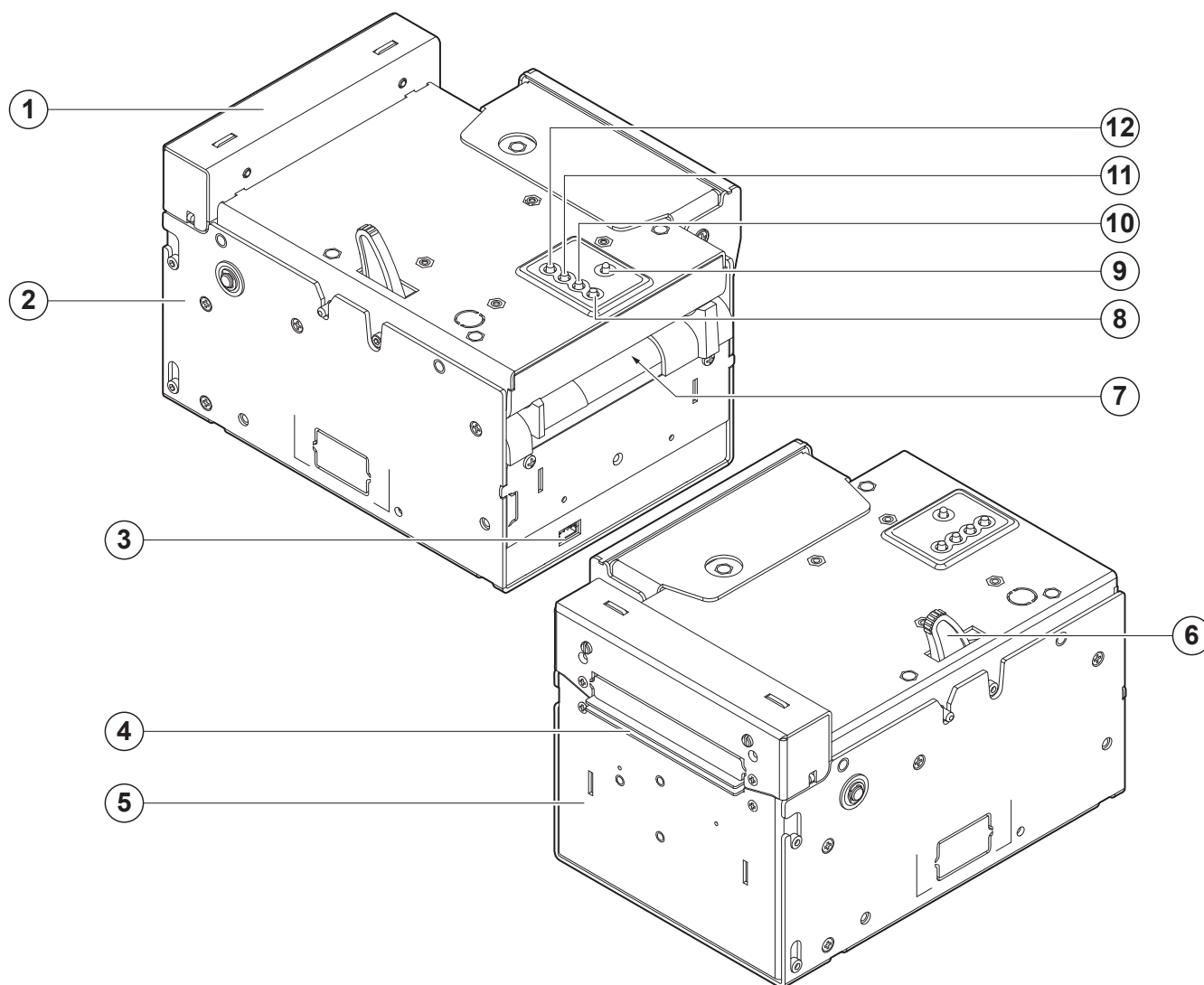
1. Power supply
2. Ruler
3. Documentation (short guide)
4. Serial cable
5. USB cable
6. Power supply cable 220V
7. Device



3.2 Device components: external views

KPM302III

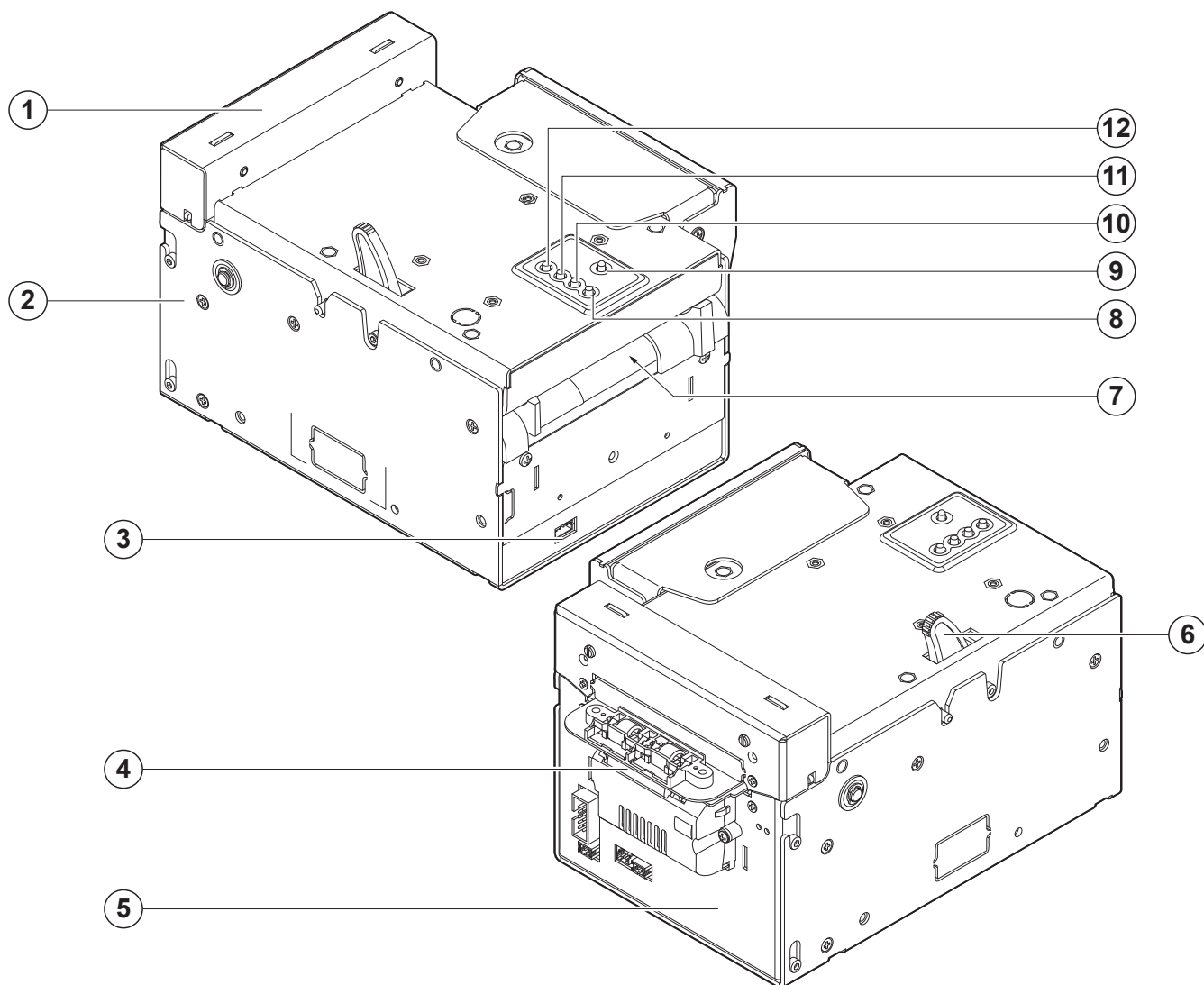
- | | |
|--|----------------------|
| 1. Print head group | 7. Paper input |
| 2. Device chassis | 8. S2 key |
| 3. External connector for low paper sensor | 9. Status LED |
| 4. Paper out | 10. S1 key |
| 5. Front cover | 11. FF FORM FEED key |
| 6. Opening lever for upper cover | 12. LF LINE FEED key |





KPM302III EJ

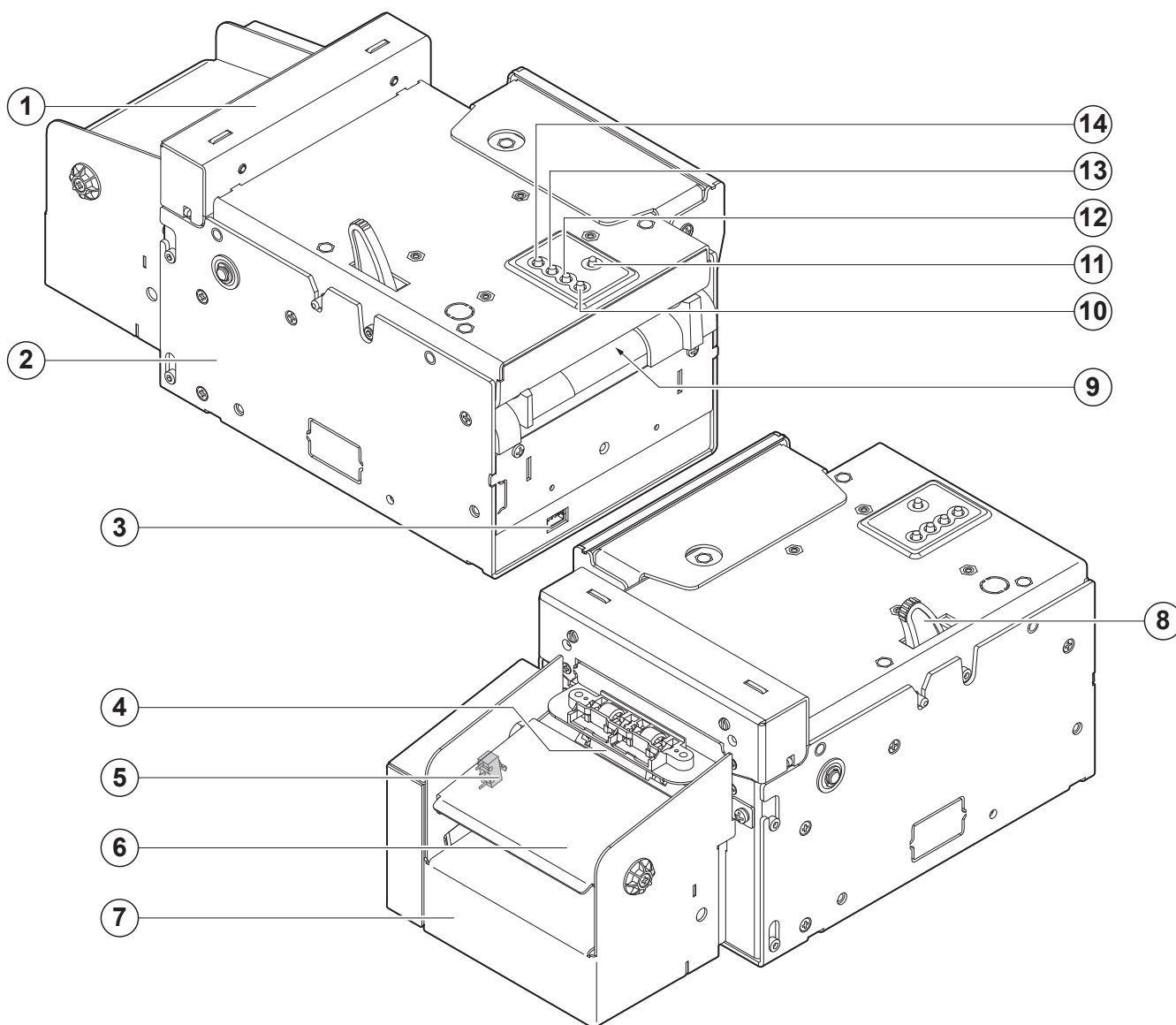
1. Print head group
2. Device chassis
3. External connector for low paper sensor
4. Paper out
5. Front cover with ejector group
6. Opening lever for upper cover
7. Paper input
8. S2 key
9. Status LED
10. S1 key
11. FF FORM FEED key
12. LF LINE FEED key





KPM302III vSEL, KPM302III hSEL

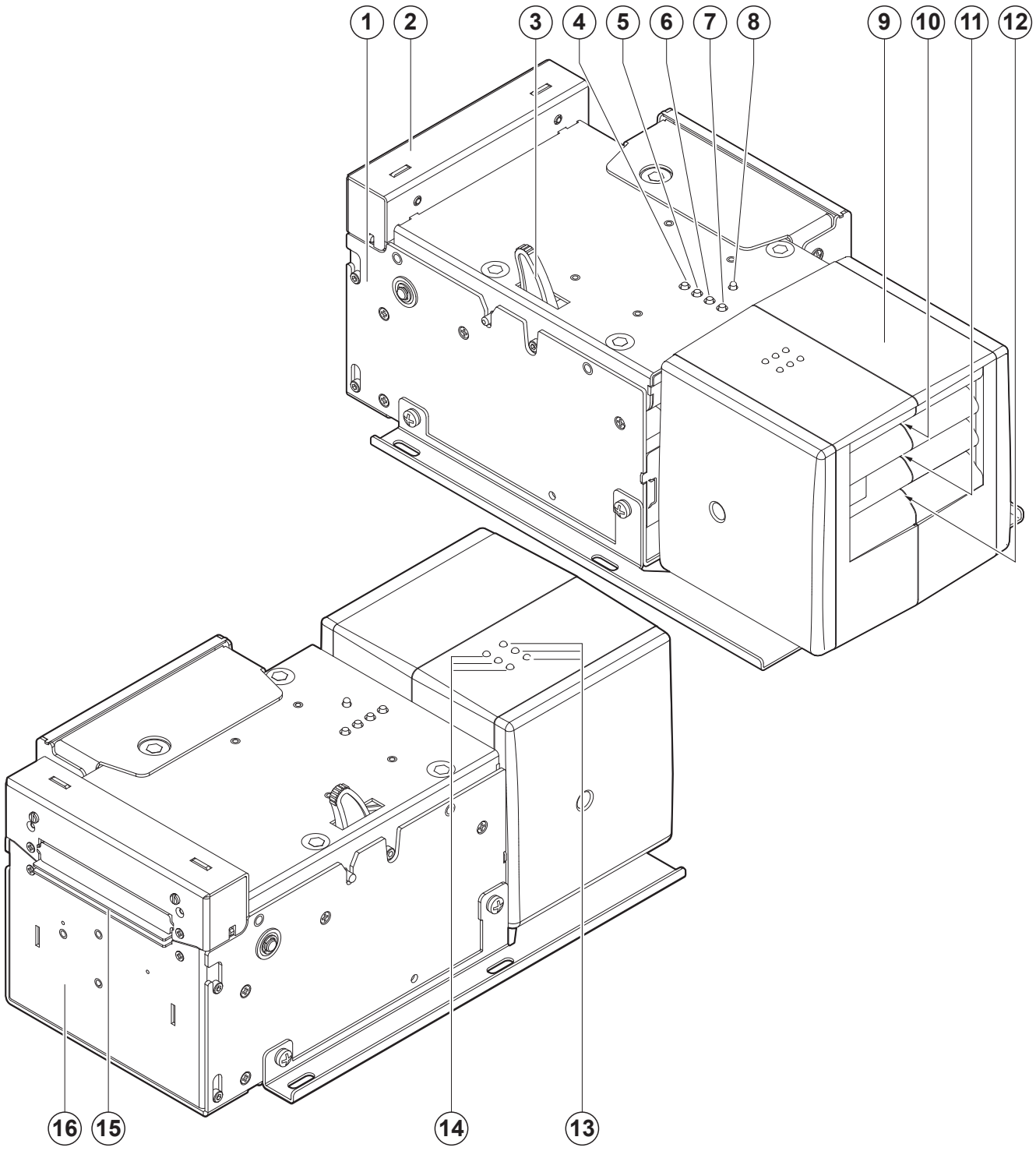
- | | |
|--|----------------------------------|
| 1. Print head group | 8. Opening lever for upper cover |
| 2. Device chassis | 9. Paper input |
| 3. External connector for low paper sensor | 10. S2 key |
| 4. Paper out | 11. Status LED |
| 5. Sensor for tilting slide position | 12. S1 key |
| 6. Tilting slide | 13. FF FORM FEED key |
| 7. Front cover with ejector group | 14. LF LINE FEED key |





KPM302III TF

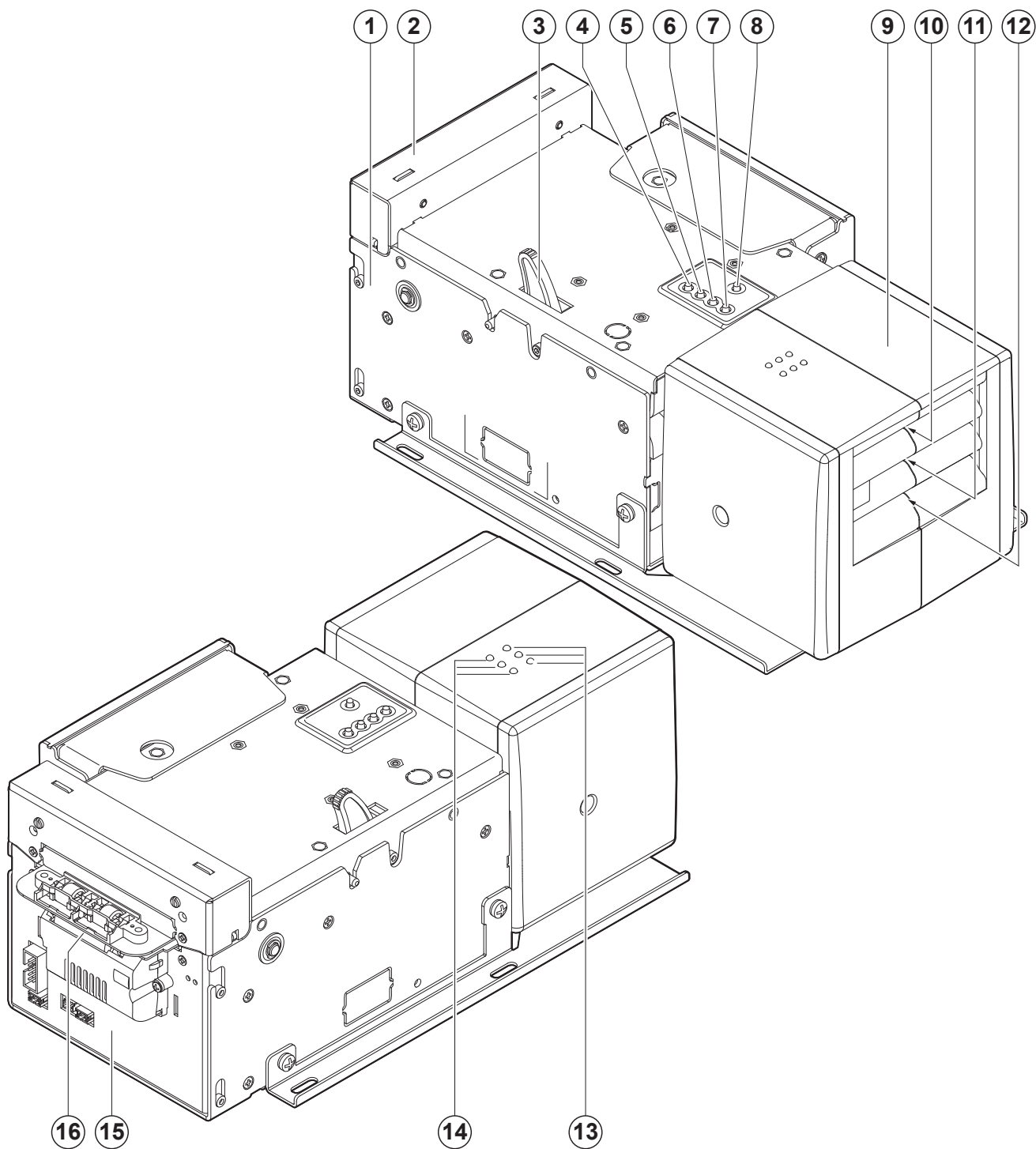
- 1. Device chassis
- 2. Print head group
- 3. Release lever for upper cover
- 4. LF LINE FEED key
- 5. FF FORM FEED key
- 6. S1 key
- 7. S2 key
- 8. Status LED
- 9. Triple feeder
- 10. Paper input feeder 1
- 11. Paper input feeder 2
- 12. Paper input feeder 3
- 13. Triple feeder LED (green)
- 14. Triple feeder LED (red)
- 15. Paper out
- 16. Front cover





KPM302III TF-EJ

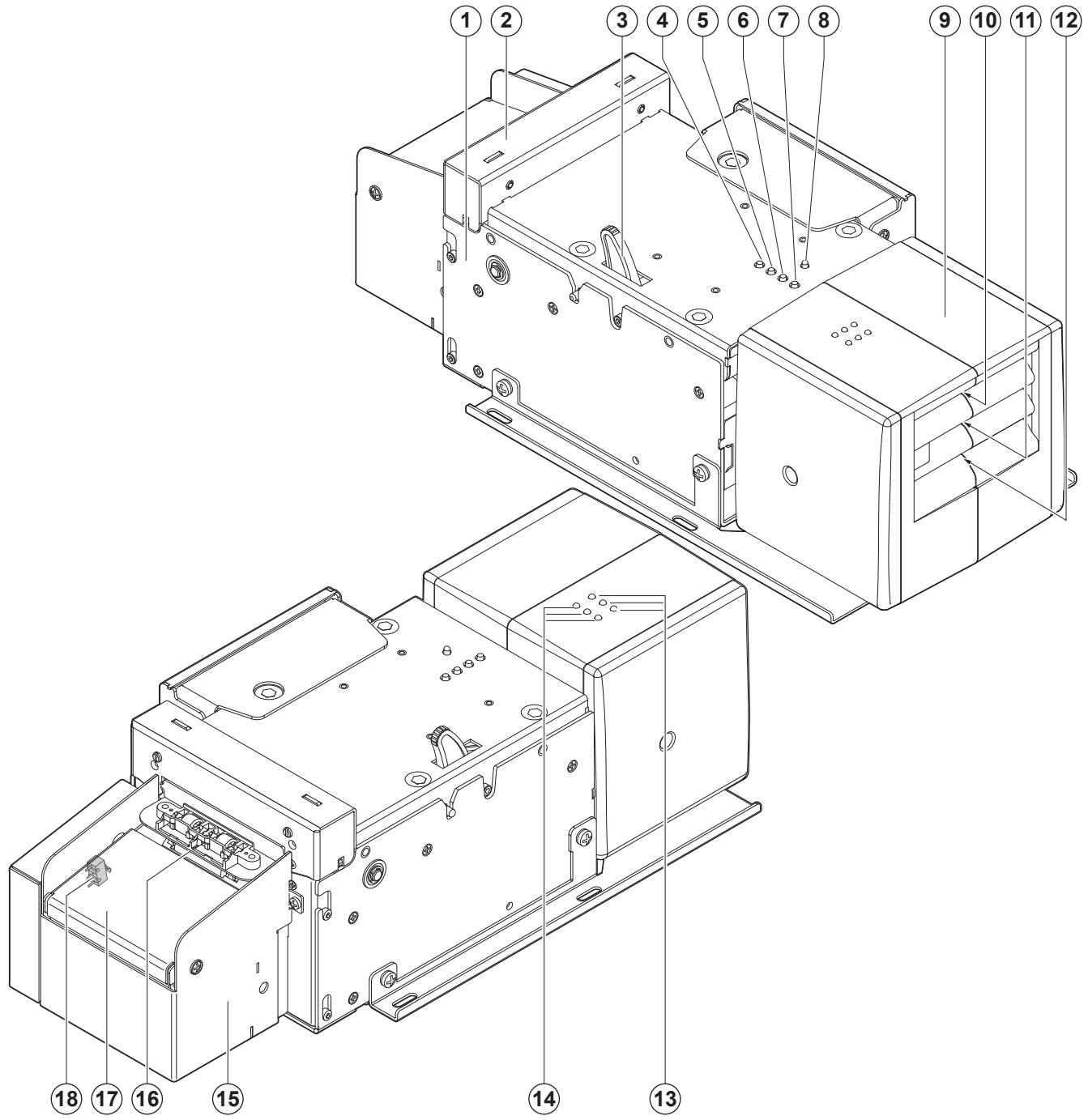
1. Device chassis
2. Print head group
3. Release lever for upper cover
4. LF LINE FEED key
5. FF FORM FEED key
6. S1 key
7. S2 key
8. Status LED
9. Triple feeder
10. Paper input feeder 1
11. Paper input feeder 2
12. Paper input feeder 3
13. Triple feeder LED (green)
14. Triple feeder LED (red)
15. Front cover with ejector group
16. Paper out





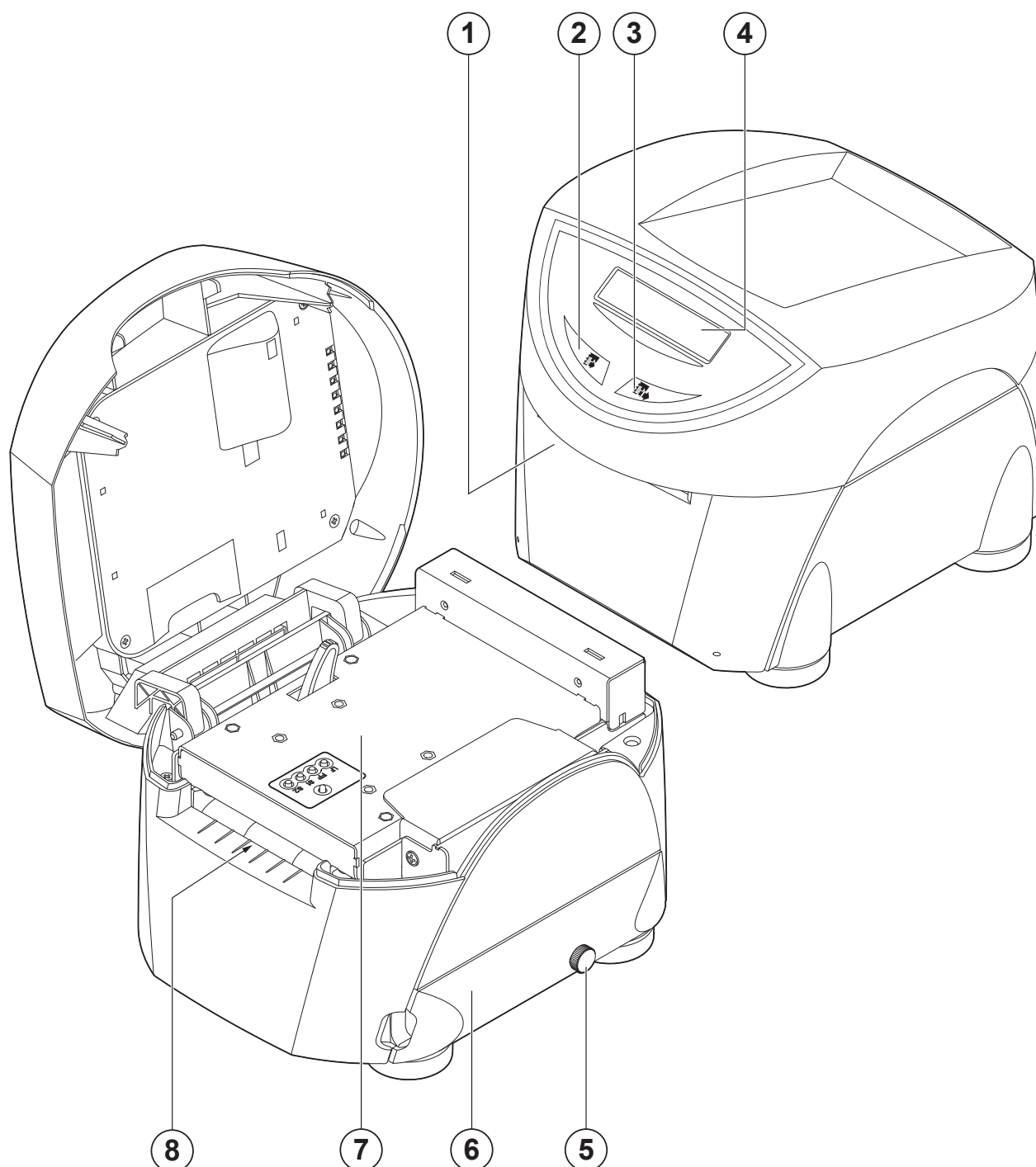
KPM302III TF-hSEL

- 1. Device chassis
- 2. Print head group
- 3. Release lever for upper cover
- 4. LF LINE FEED key
- 5. FF FORM FEED key
- 6. S1 key
- 7. S2 key
- 8. Status LED
- 9. Triple feeder
- 10. Paper input feeder 1
- 11. Paper input feeder 2
- 12. Paper input feeder 3
- 13. Triple feeder LED (green)
- 14. Triple feeder LED (red)
- 15. Front cover with selector group
- 16. Paper out
- 17. Tilting slide
- 18. Sensor for tilting slide position



TK202III, TK302III

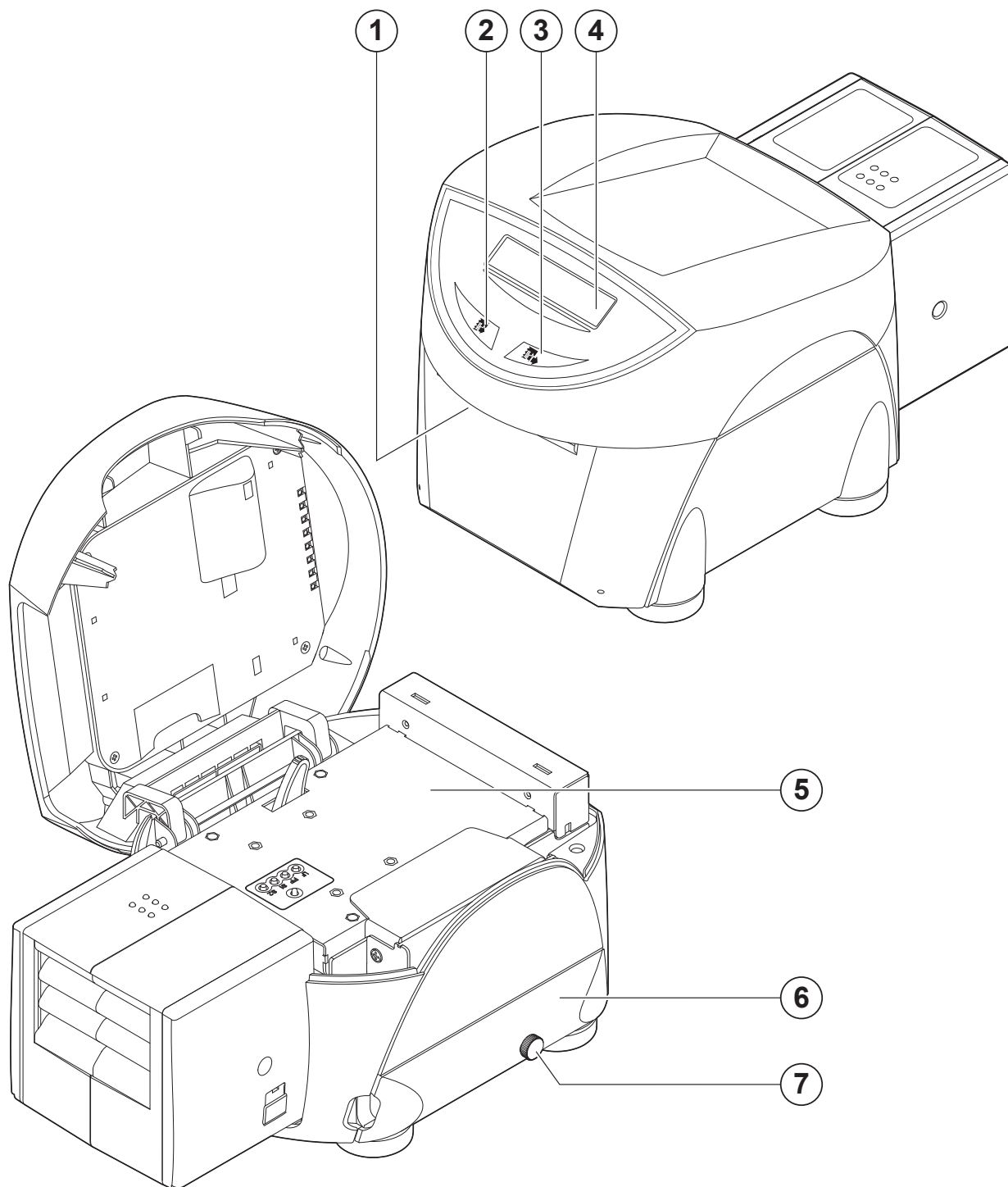
1. Paper out
2. FF FORM FEED key
3. LF LINE FEED key
4. Display
5. Captive knob for connector cover opening
6. Connectors cover
7. Internal printer (see previous pages)
8. Paper input





TK302III TF

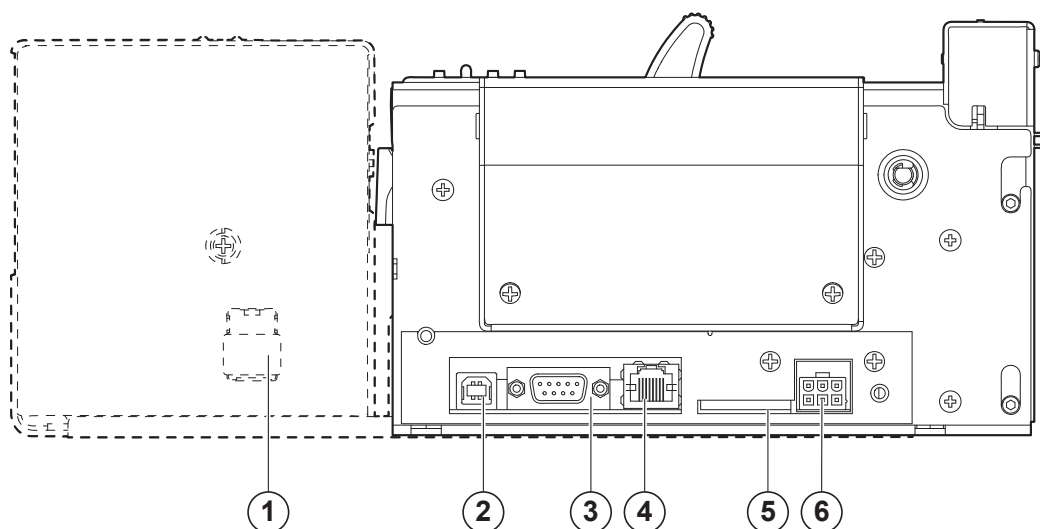
1. Paper out
2. FF FORM FEED key
3. LF LINE FEED key
4. Display
5. Internal printer with triple feeder (see previous pages)
6. Connectors cover
7. Captive knob for connector cover opening



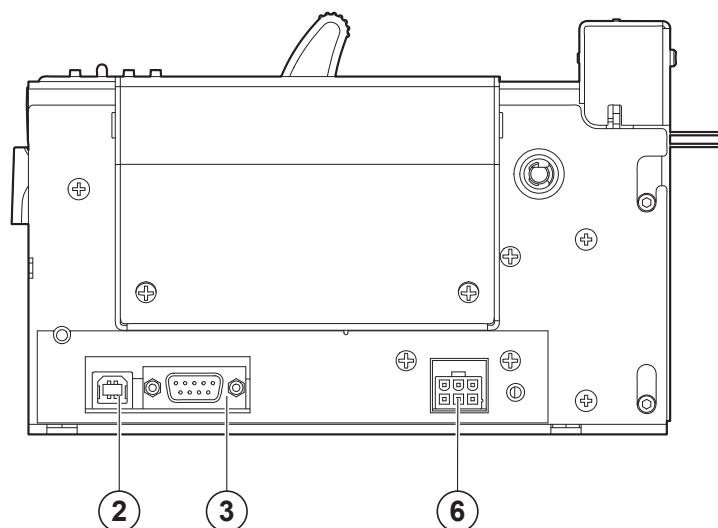
3.3 Device components: connectors view

1. Cover for external low paper sensor connectors (for models with triple feeder)
2. USB port
3. RS232 serial port
4. ETHERNET port
5. Slot for SD card
6. Power supply port

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III, TK302III TF



TK202III

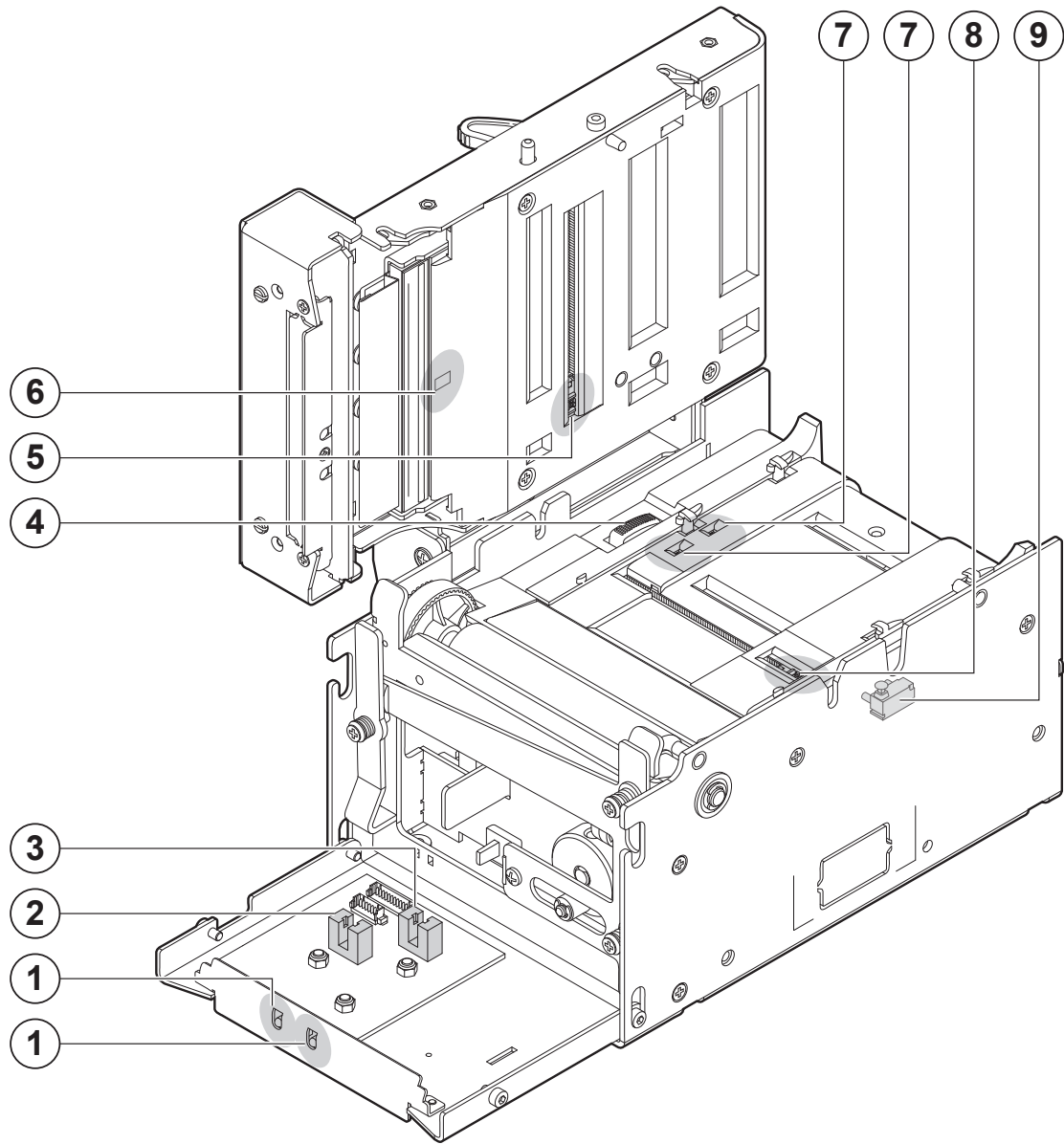


NOTE: For ease of reference, for some models is represented only the internal printer group without external chassis or triple feeder.



3.4 Device components: internal view

1. Sensors for detecting paper out presence
2. Sensor for detecting the opening of the front cover
3. Sensor for detecting the cutter position (only for models with autocutter)
4. Unlocking button for mobile paper guide
5. Top mobile sensor for detecting black mark on the thermal side of paper or hole between tickets
6. Sensor for printhead temperature
7. Sensor for detecting paper presence
8. Bottom mobile sensor for detecting black mark on the non-thermal side of paper or hole between tickets
9. Sensor for detecting the opening of the upper cover

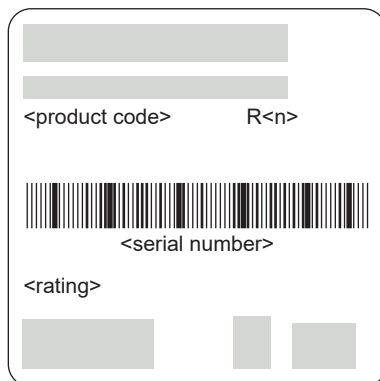


NOTE: For ease of reference, for some models is represented only the standard model of the internal printer group without external chassis or triple feeder.

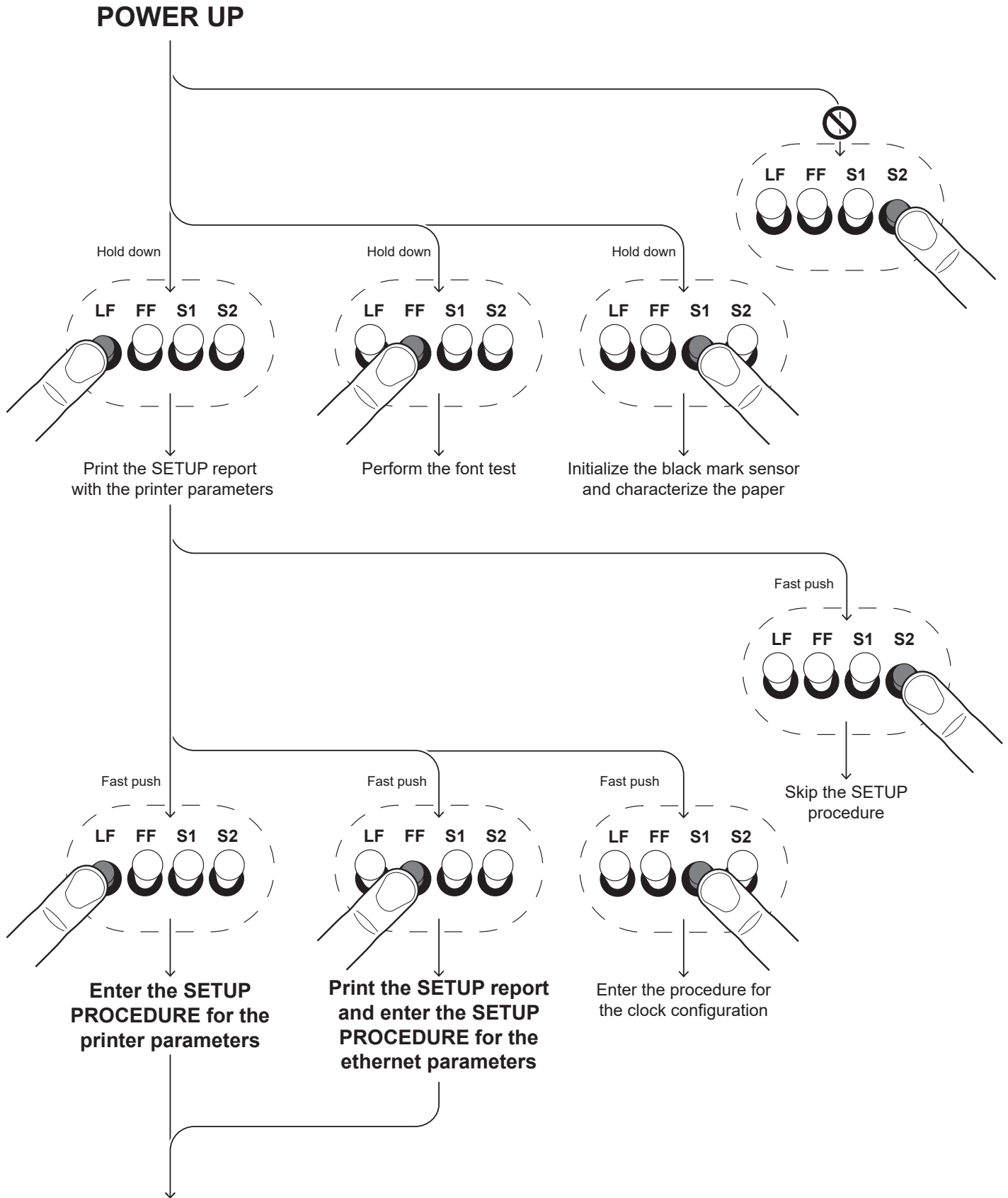


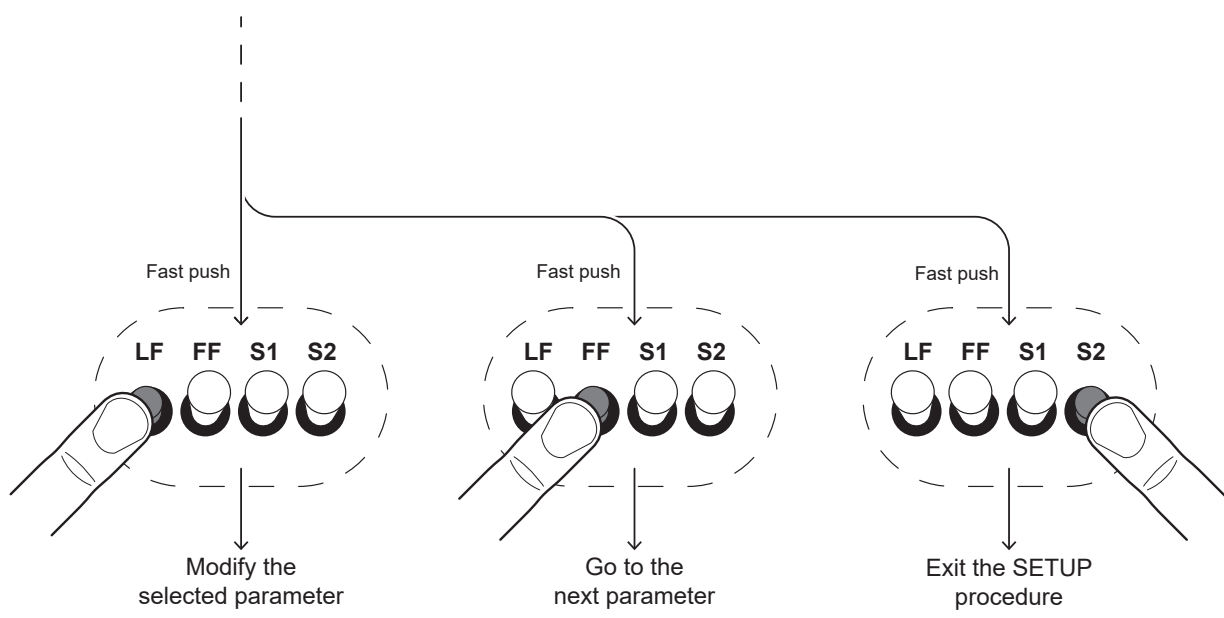
3.5 Device labels

The main data used to identify the machine are shown on the label attached to the bottom of the device. In particular, it shows the electrical data for the connection to a power source. It also shows the product code, the serial number and the hardware revision (R).



3.6 Key functions: power up



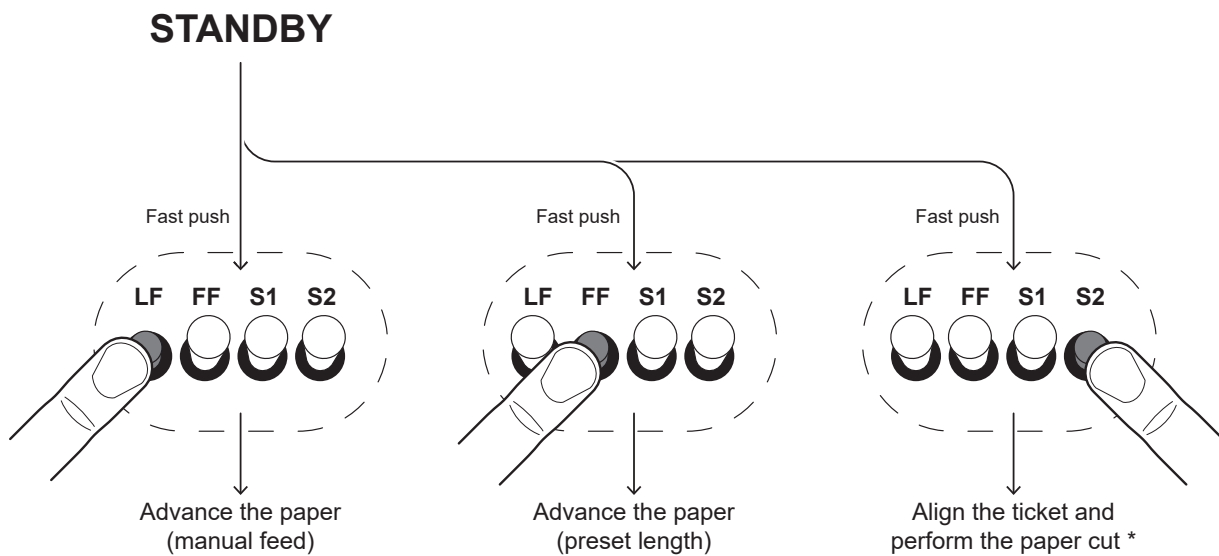


NOTE:

During power-up, do not press the S2 key because the device enter in a test modality that becomes unusable by keys; if this event occurs, turn off the device and turn on without pressing any key.

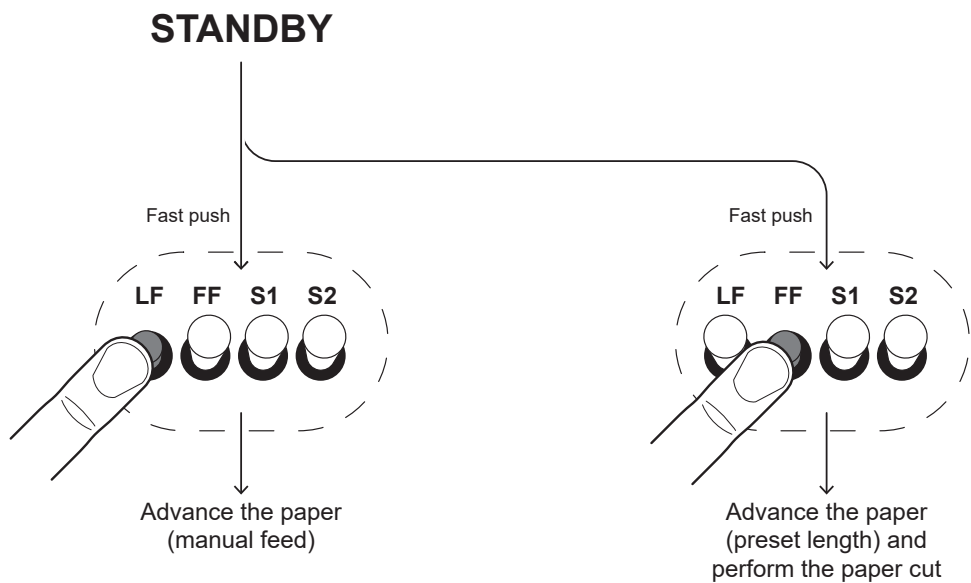
3.7 Key functions: standby

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL



NOTE:
(*) Only with alignment enabled

TK202III, TK302III, TK302III TF



3.8 Status LED flashes

The status LED indicates hardware status of device. Given in the table below are the various LED signals and the corresponding device status.

STATUS LED		DESCRIPTION
-	OFF	DEVICE OFF
GREEN	ON	DEVICE ON: NO ERROR
GREEN COMMUNICATION STATUS	x 1	RECEIVE DATA
	x 2	RECEPTION ERRORS (PARITY, FRAME ERROR, OVERRUN ERROR)
	x 3	COMMAND NOT RECOGNIZED
	x 4	COMMAND RECEPTION TIME OUT
YELLOW RECOVERABLE ERROR	x 2	PRINthead OVERHEATED
	x 3	PAPER END
	x 4	PAPER JAM
	x 5	POWER SUPPLY VOLTAGE INCORRECT
	x 6	COVER OPEN
RED UNRECOVERABLE ERROR	x 3	RAM ERROR
	x 4	EEPROM ERROR
	x 5	CUTTER ERROR ⁽¹⁾
	x 6	FRONT COVER ERROR
	x 7	SELECTOR GROUP NOT PRESENT ⁽²⁾

NOTES:

(1) Only for models with cutter.



(2) The error occurs when the selector device is not present but the setup parameter "Selector" is set on "Enabled" value (see [paragraph 6.7](#)).

3.9 Triple feeder LED flashes

KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III TF

The LED panel of triple feeder is comprised of two LED (one of green colour and one of red colour) for each of the three paper input feeder.

The LED indicate the triple feeder status and the paper status. Given in the table below are the various LED signals and the corresponding triple feeder status.

STATUS LED		DESCRIPTION
RED PAPER END WARNING	OFF	PAPER PRESENCE
	ON	LOW PAPER
GREEN TRIPLE FEEDER STATUS	OFF	NO PAPER OR PAPER IN PARKING SPACE ⁽¹⁾
	ON	PAPER LOADED
		PAPER END DURING PRINTING
		PAPER JAM

NOTE:

(1) The paper is in "parking space" when it is present on the entrance of feeder but it is not loaded into the printer.



3.10 Messages on display

The display indicates the hardware status of device. Given in table below are the various display messages and the corresponding device status.

TK202III, TK302III, TK302III TF

PRINTER READY 01/01/21 12:00:00 Device ON: no error	RECEIVING DATA SPOOLING..... Receive data
RS232 RX ERROR CHECK RS232 SETTINGS Reception errors (parity, frame error, overrun error)	COMMAND ERROR COMMAND NOT FOUND Command not recognized
COMMAND ERROR COMMAND NOT FINISH Command reception time out	PRINthead OVERTEMP WAIT COOLING..... Head over temperature
END PAPER PLEASE INSERT PAPER Paper end	PAPER JAM CLEAR PAPER PATH Paper jam
POWER VOLTAGE ERROR CHECK POWER SUPPLIER Power supply voltage incorrect	COVER ERROR CLOSE COVERS Cover open
RAM ERROR POWER ON AGAIN RAM error	EEPROM ERROR POWER ON AGAIN EEPROM error
CUTTER ERROR OPEN COVER AND CLEAR Cutter error	CUTTER ERROR CUTTER COVER OPEN! Cutter cover open
PRINT TICKET ERROR! CHECK TICKETS PATH Black mark alignment error	SELECTOR ERROR CHECK HW CONNECTION Selector error ⁽¹⁾

NOTE:(1) The error occurs when the selector device is not present but the setup parameter "Selector" is set on "Enabled" value (see [paragraph 6.7](#)).





4 INSTALLATION

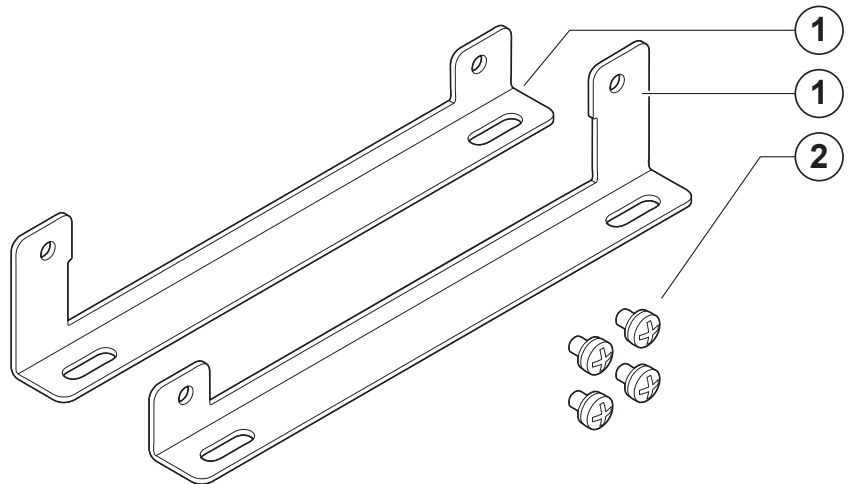
4.1 Fixing brackets

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL

The device includes a kit for the assembly of two additional fixing brackets (see following figure).

The kit contains:

- 1. No.2 fixing brackets;
- 2. No.4 fixing screws.



For the assembly procedure, proceed as follows:

1

Fix the bracket on the right side of the device.

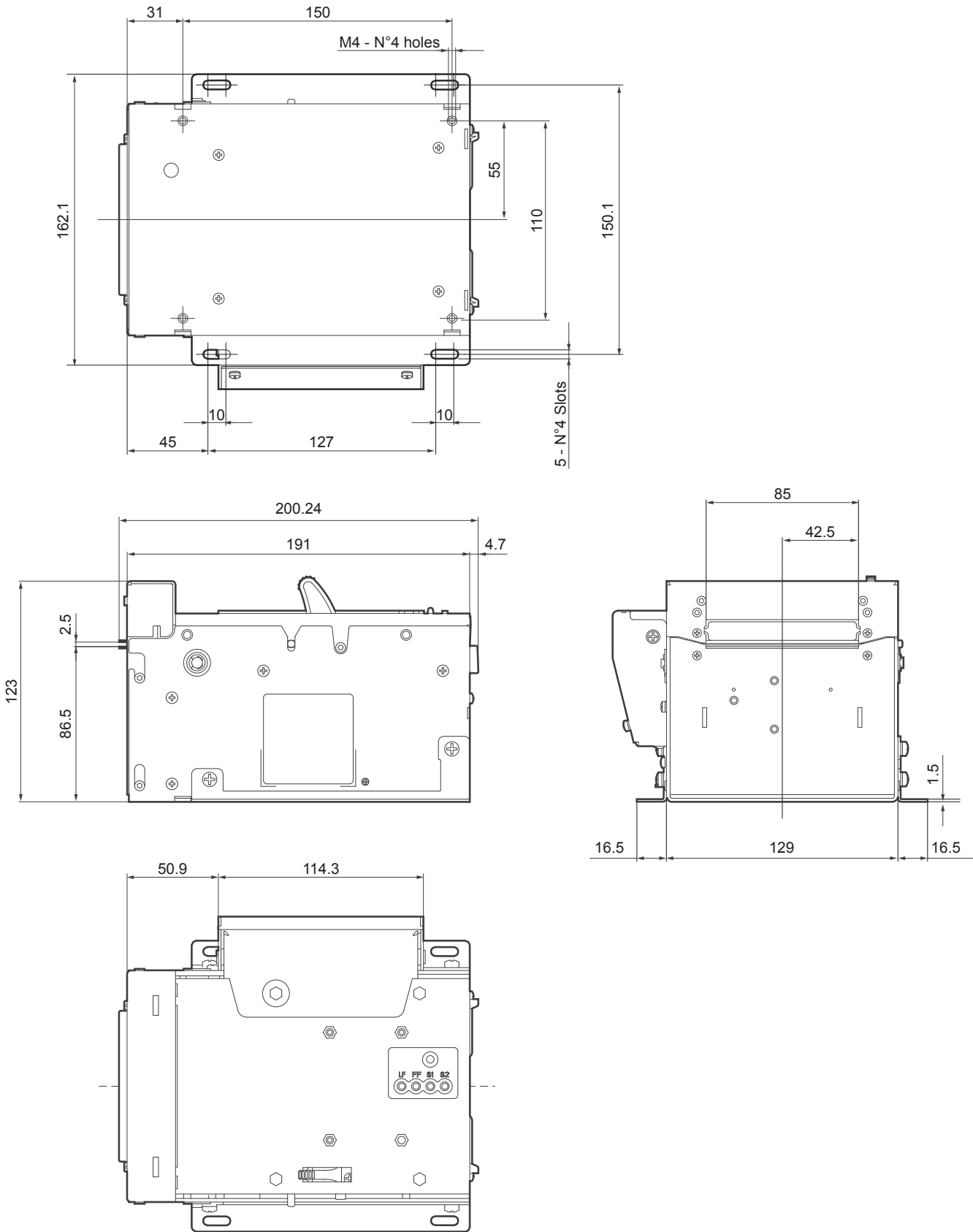
2

Fix the bracket on the left side of the device.



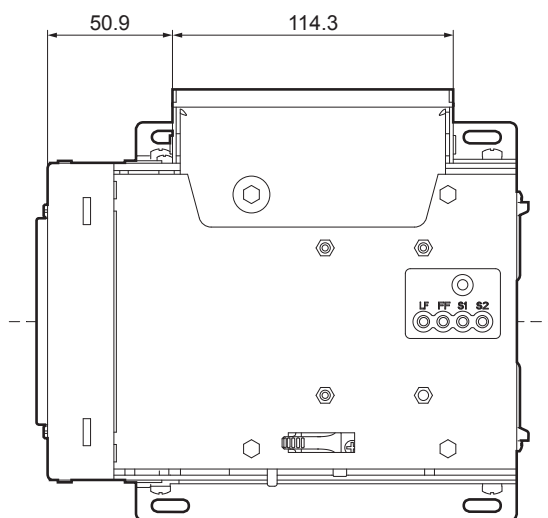
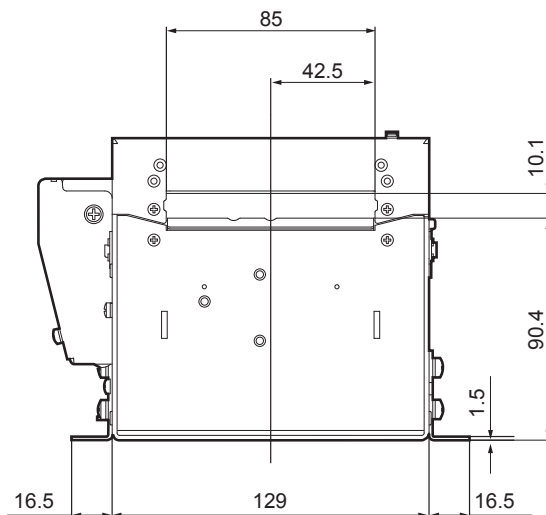
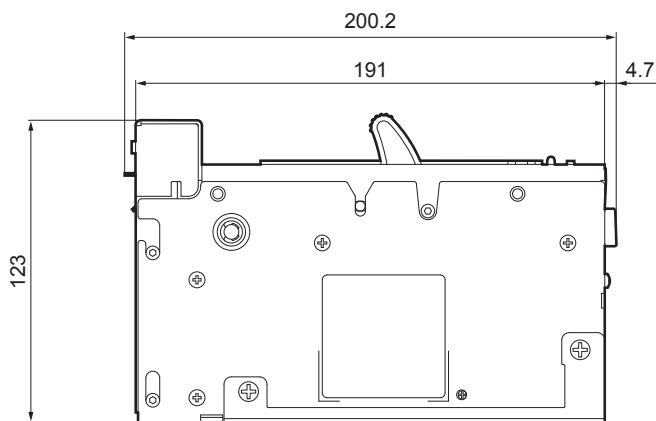
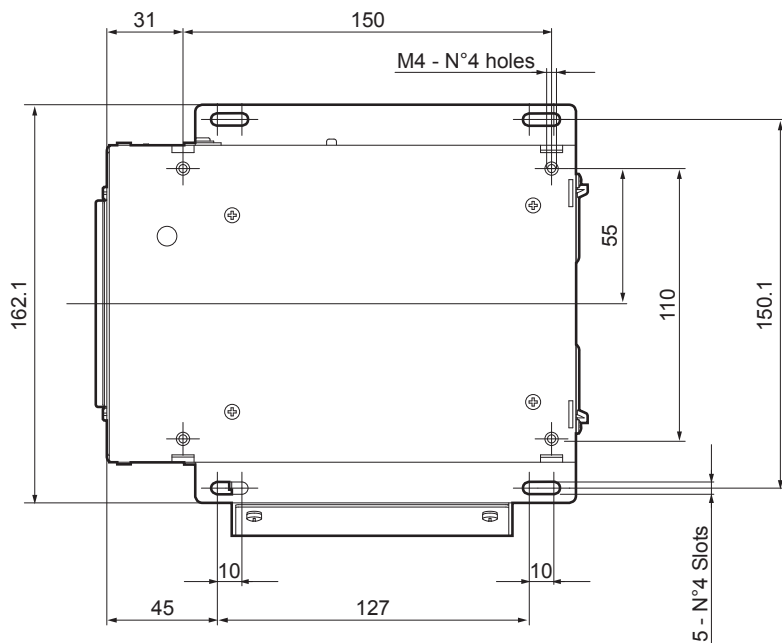
The following figures (dimensions in millimetres) show the device overall dimensions with the two additional brackets.

KPM302III



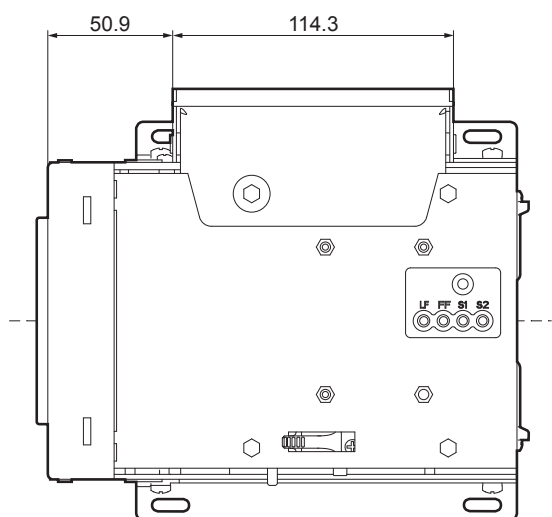
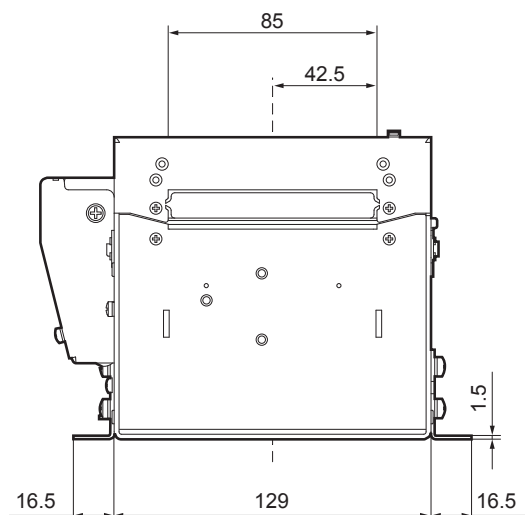
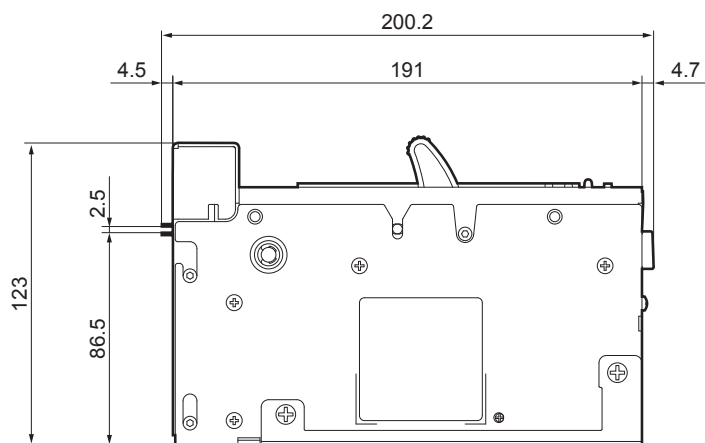
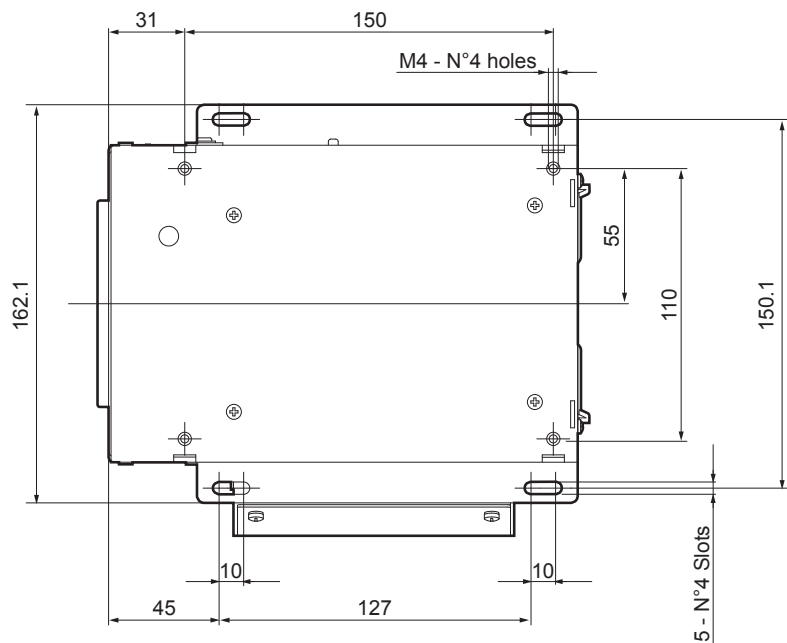


KPM302III (CUT&DROP configuration)





KPM302III (BURSTER configuration)

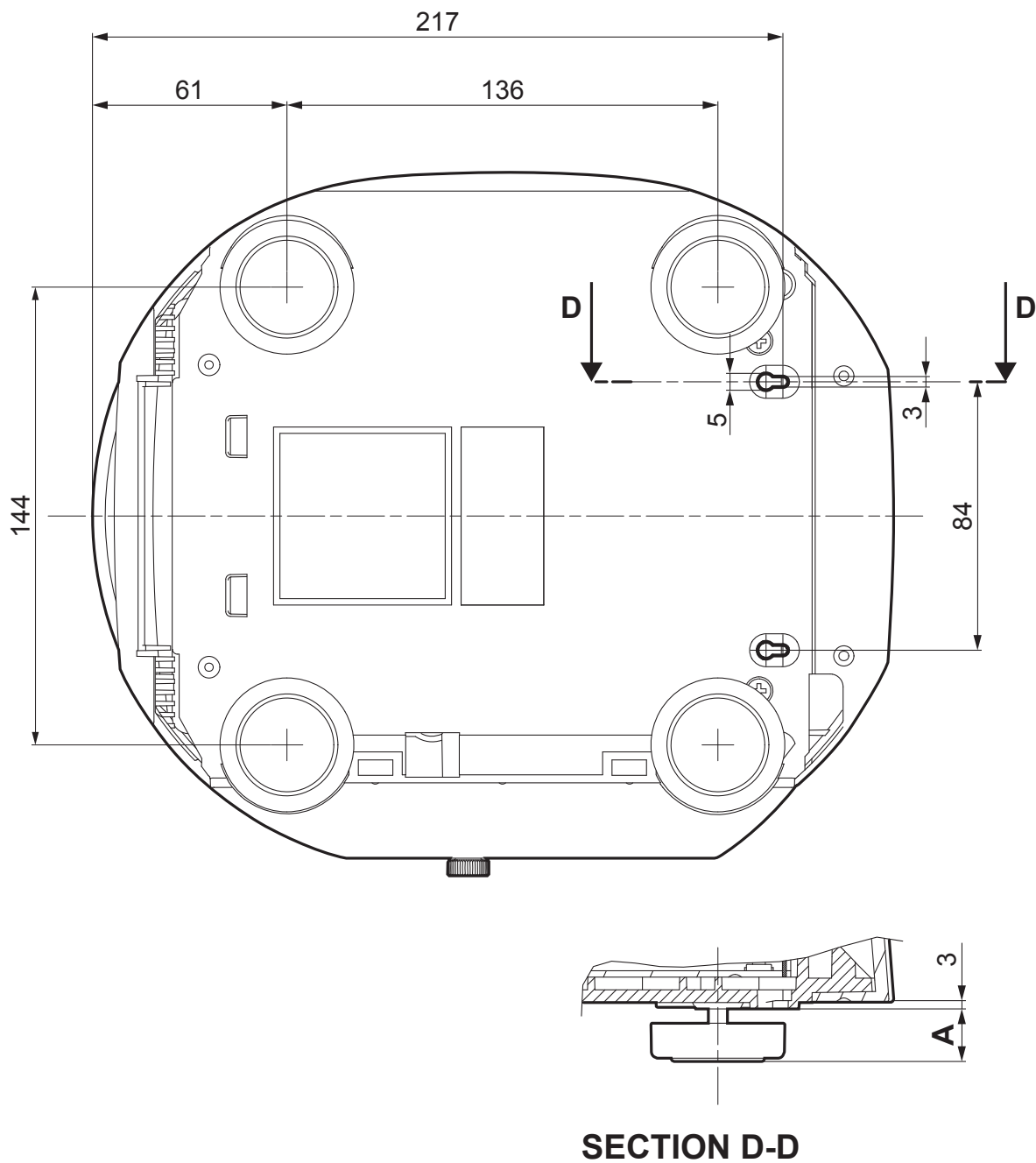


4.2 Fixing slots

TK202III, TK302III, TK302III TF

The device is provided with two slots for the mounting of the machine on desk.

The slots are placed at the bottom of the machine (see following figure)





The height A shown in the previous figure varies according to the accessory mounted to the device (see [chapter 11](#)).

Arrange the desk with two fixing pins according to the measures shown in the previous page and the values of the height A listed in the table below.

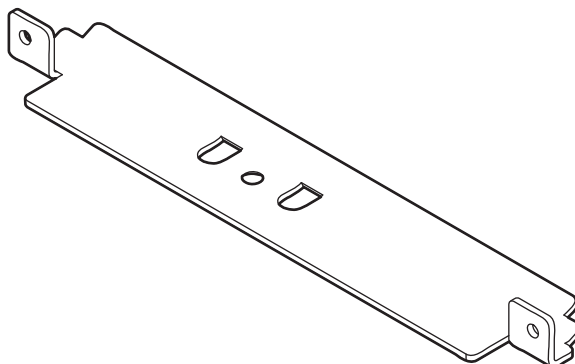
CONFIGURATION	HEIGHT
Device	12.5 mm
Device with paper roll holder (code 974BA010000312)	16 mm
Device with plastic ticket tray (code 976BD010000001)	18 mm
Device with metallic ticket tray (code 976BB010000003)	14.5 mm

4.3 BURSTER configuration

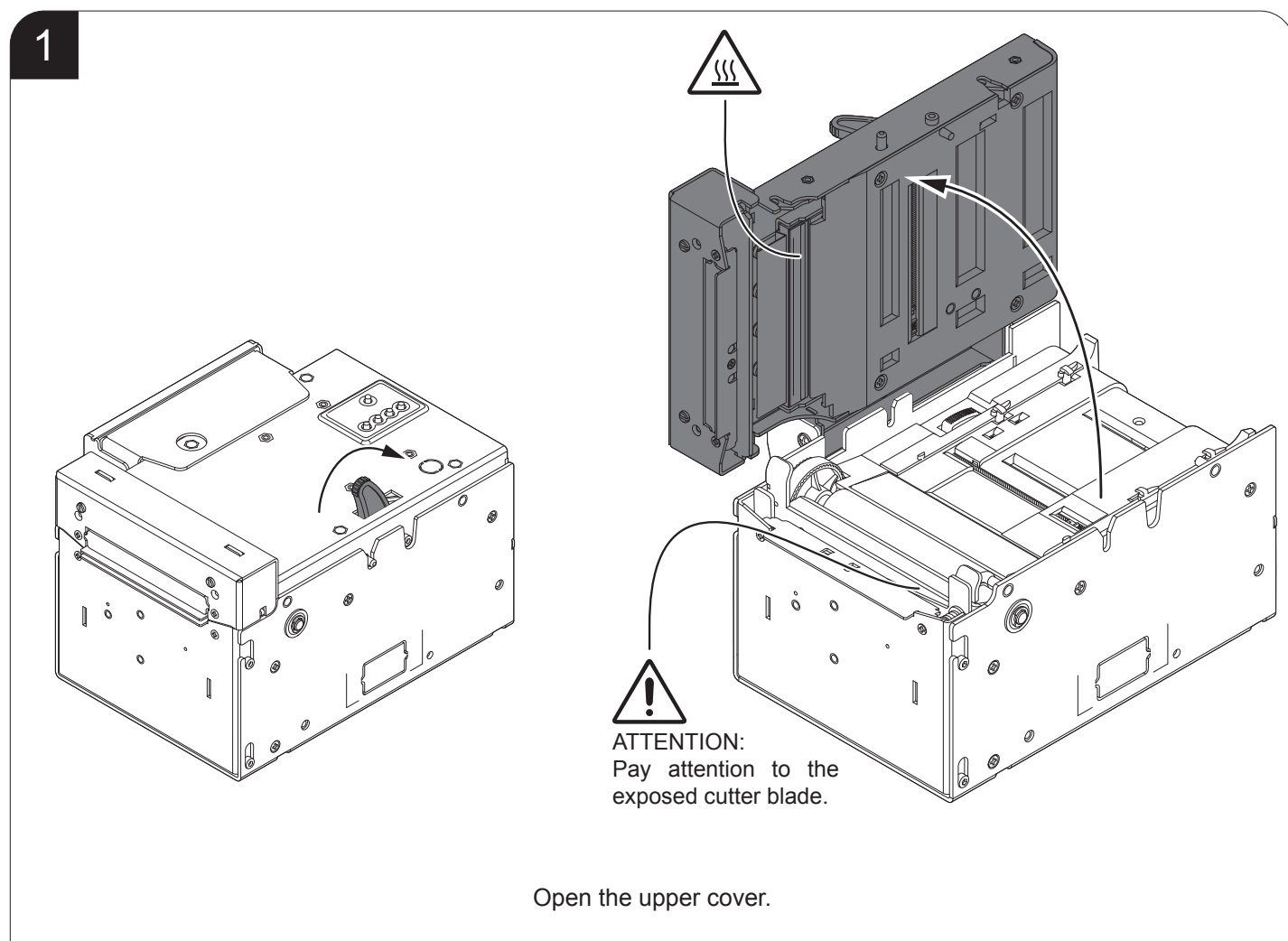
KPM302III, KPM302III TF

The device includes a kit for BURSTER configuration.

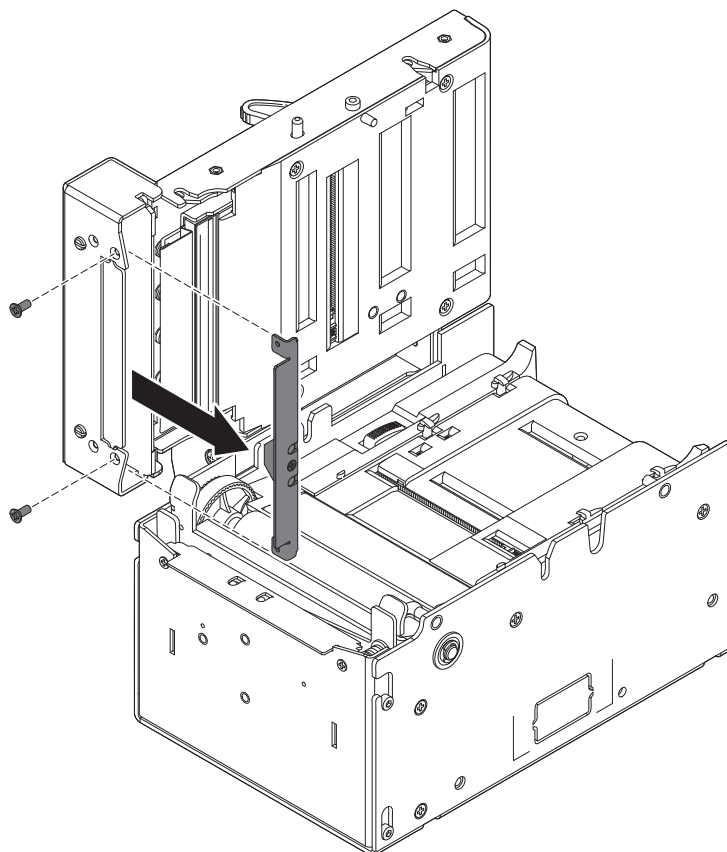
The kit contains the upper mouth for paper out feed (see following figure).



For the assembly procedure, proceed as follows:

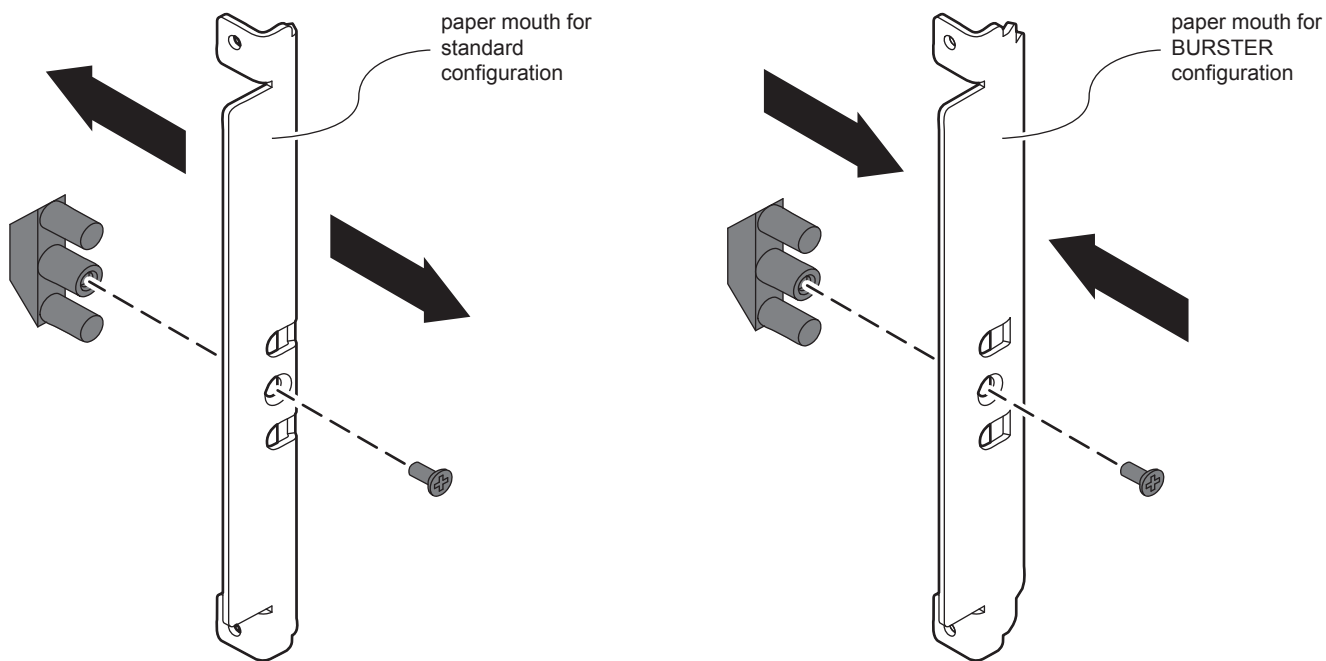


2



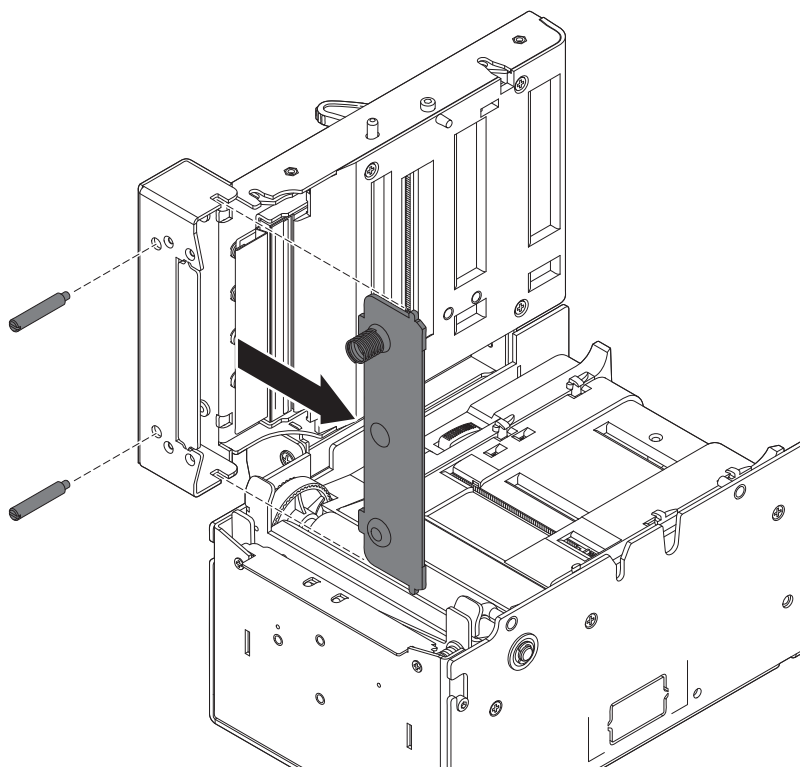
Unscrew the fixing screws and remove the upper paper mouth for the standard configuration.

3



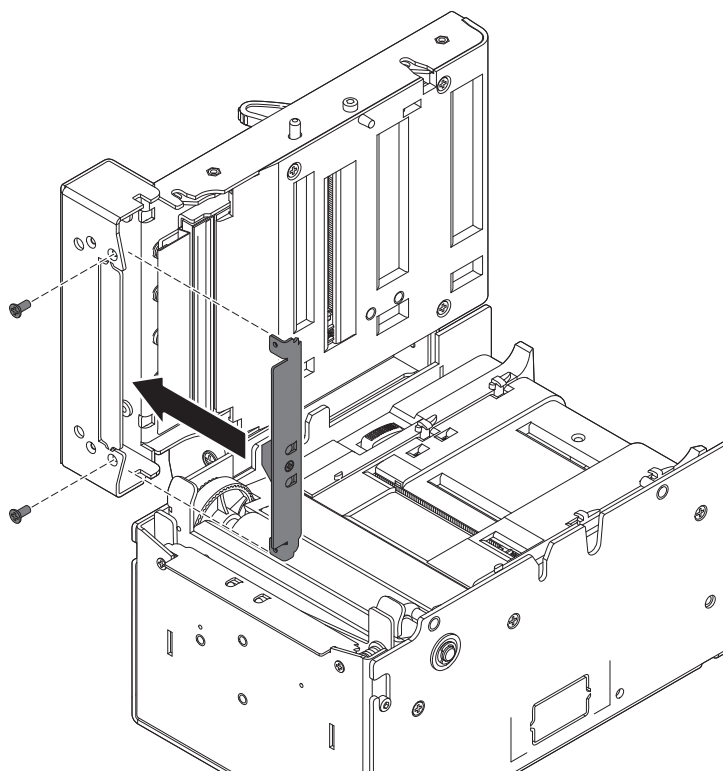
Unscrew the fixing screw and remove the light guide from the paper mouth for the standard configuration. Using the same screw, fix the same light guide to the paper mouth for the BURSTER configuration.

4



Unscrew the fixing pins and take off the fixed blade and the spring.

5



Fix the paper mouth group for the BURSTER configuration by using the screws previously removed.

NOTE:

For ease of reference, for model with triple feeder is represented only the printer group without triple feeder.



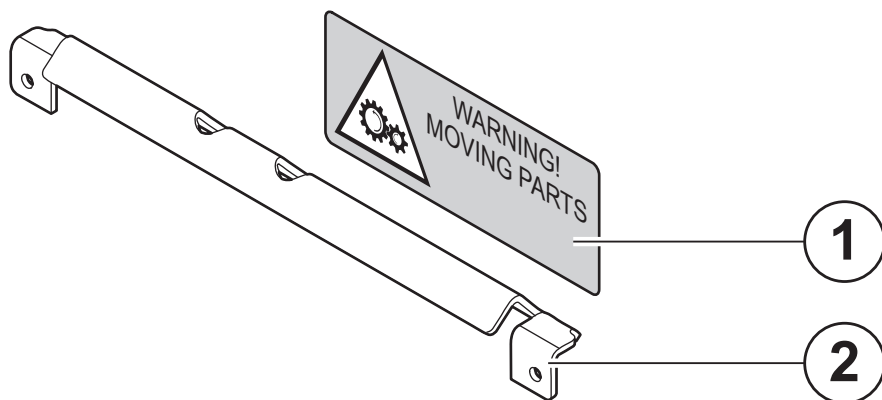
4.4 CUT&DROP configuration

KPM302III, KPM302III TF

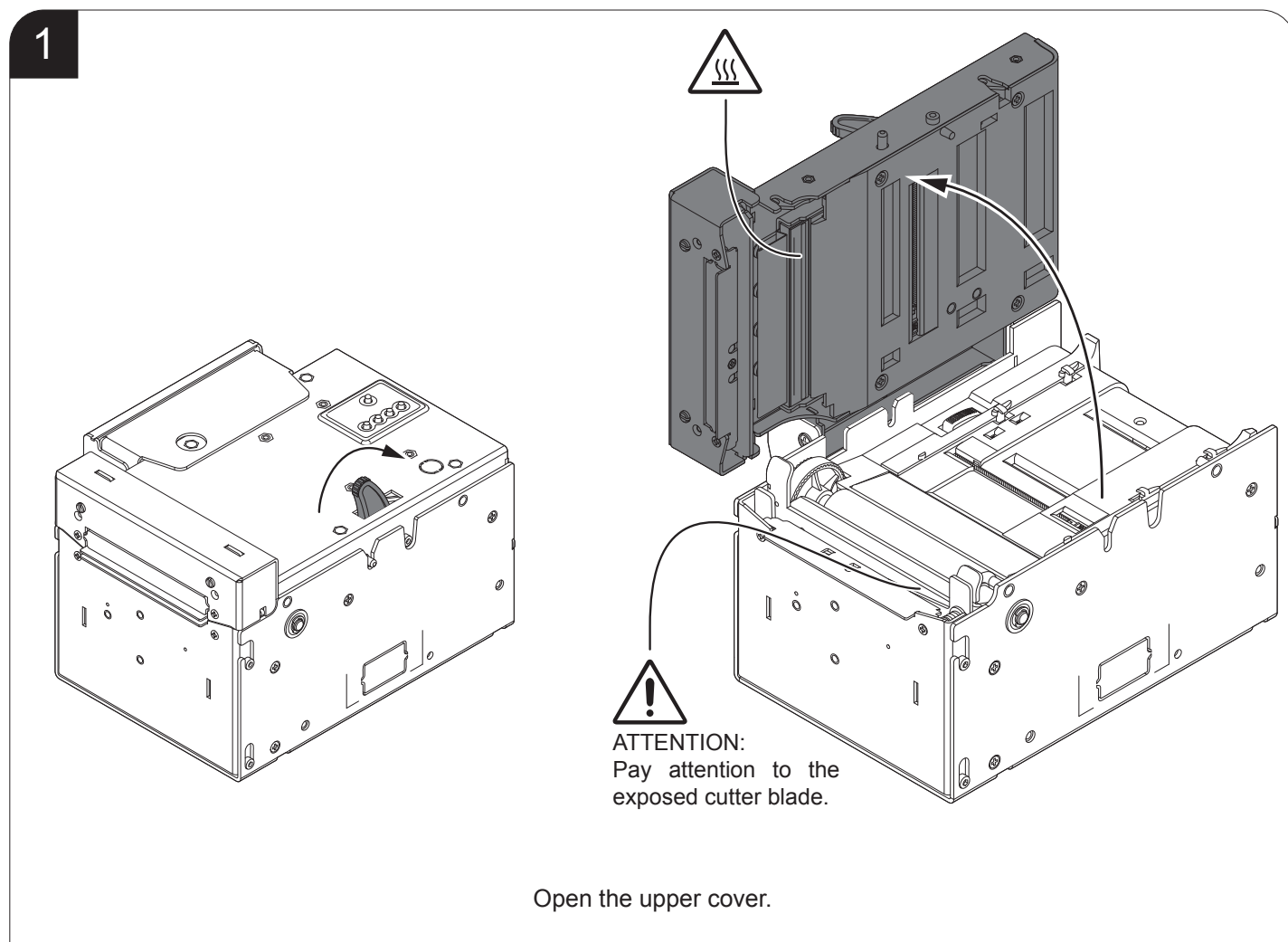
The device includes a kit for the CUT&DROP configuration (see the following figure).

The kit contains:

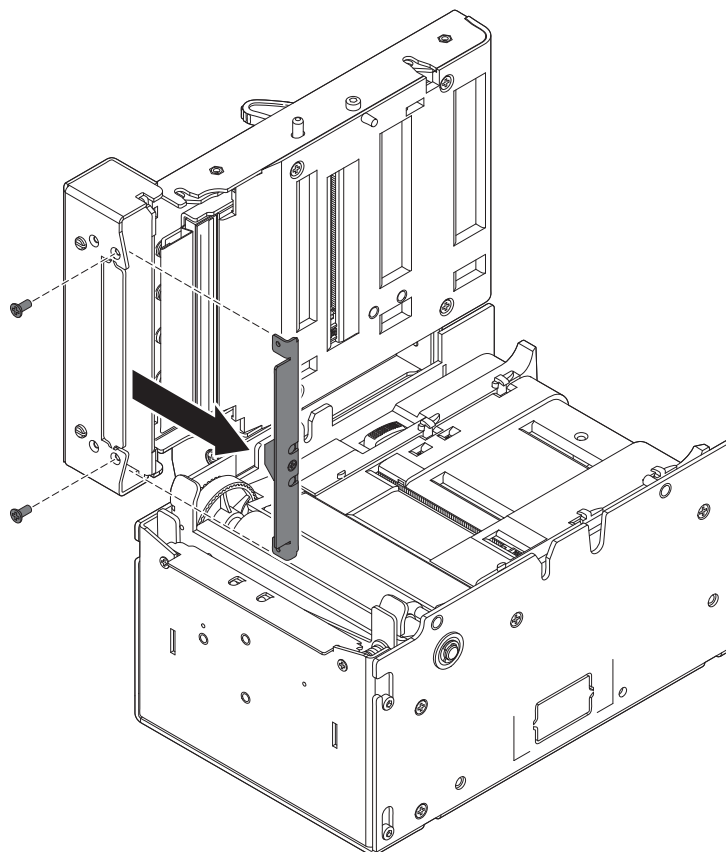
1. Label
2. Lower paper out feed mouth.



For the assembly procedure, proceed as follows:

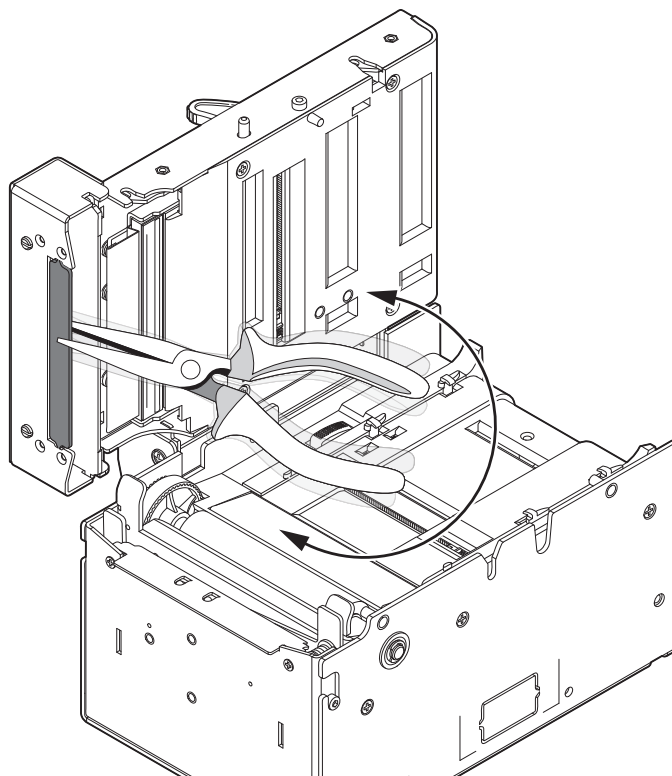


2



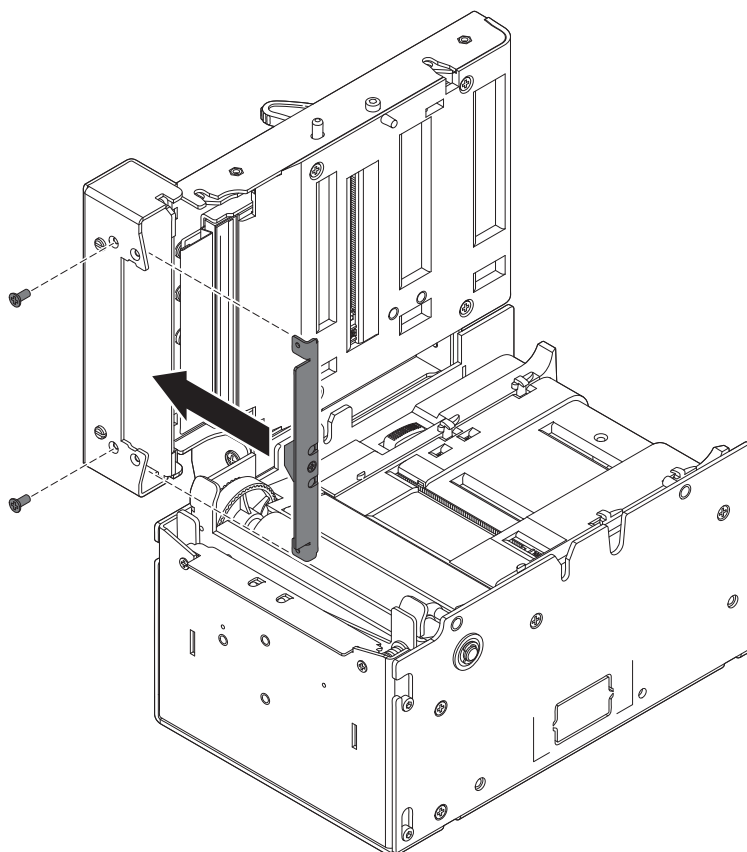
Unscrew the fixing screws and remove the upper paper mouth for the standard configuration.

3



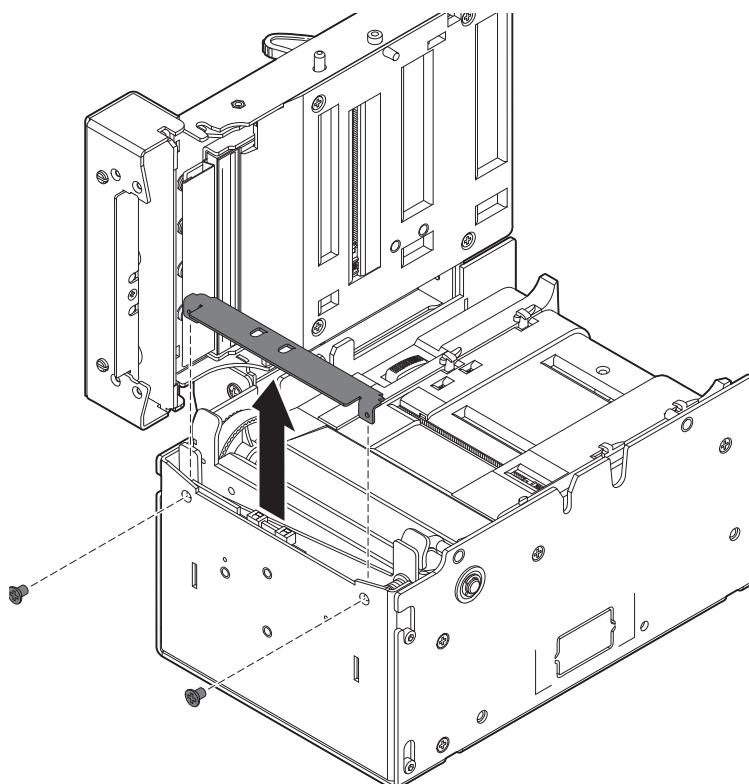
Using a clamp, remove the precut sheet metal on the upper device cover.

4



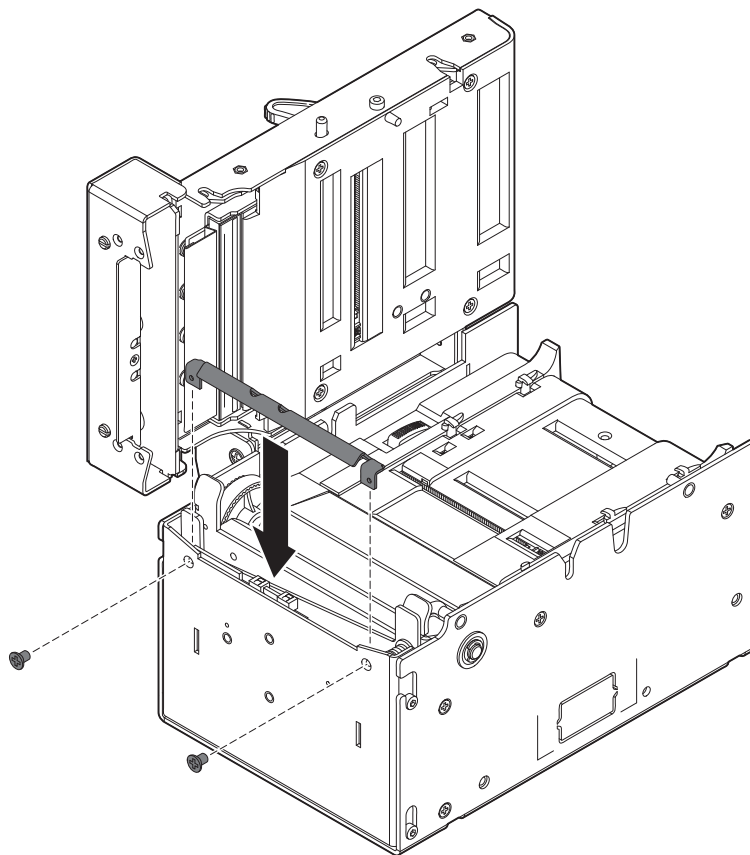
Fix the upper paper group for the standard configuration in the upper holes on the cover using the screws previously removed.

5



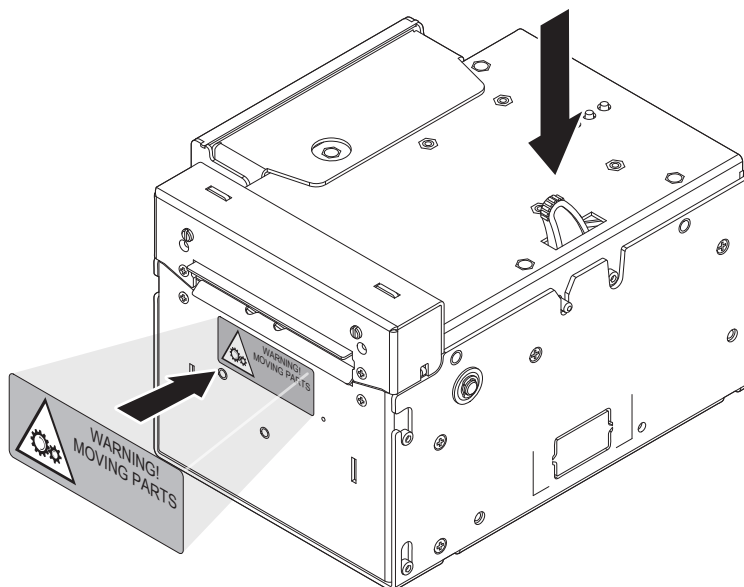
Unscrew the two fixing screws on the front cover and take off the lower paper mouth of the standard configuration.

6



Fix the lower paper mouth for the CUT&DROP configuration by using the screws previously removed.

7



Close the upper cover and paste the label (supplied with the CUT&DROP kit) on the front cover.

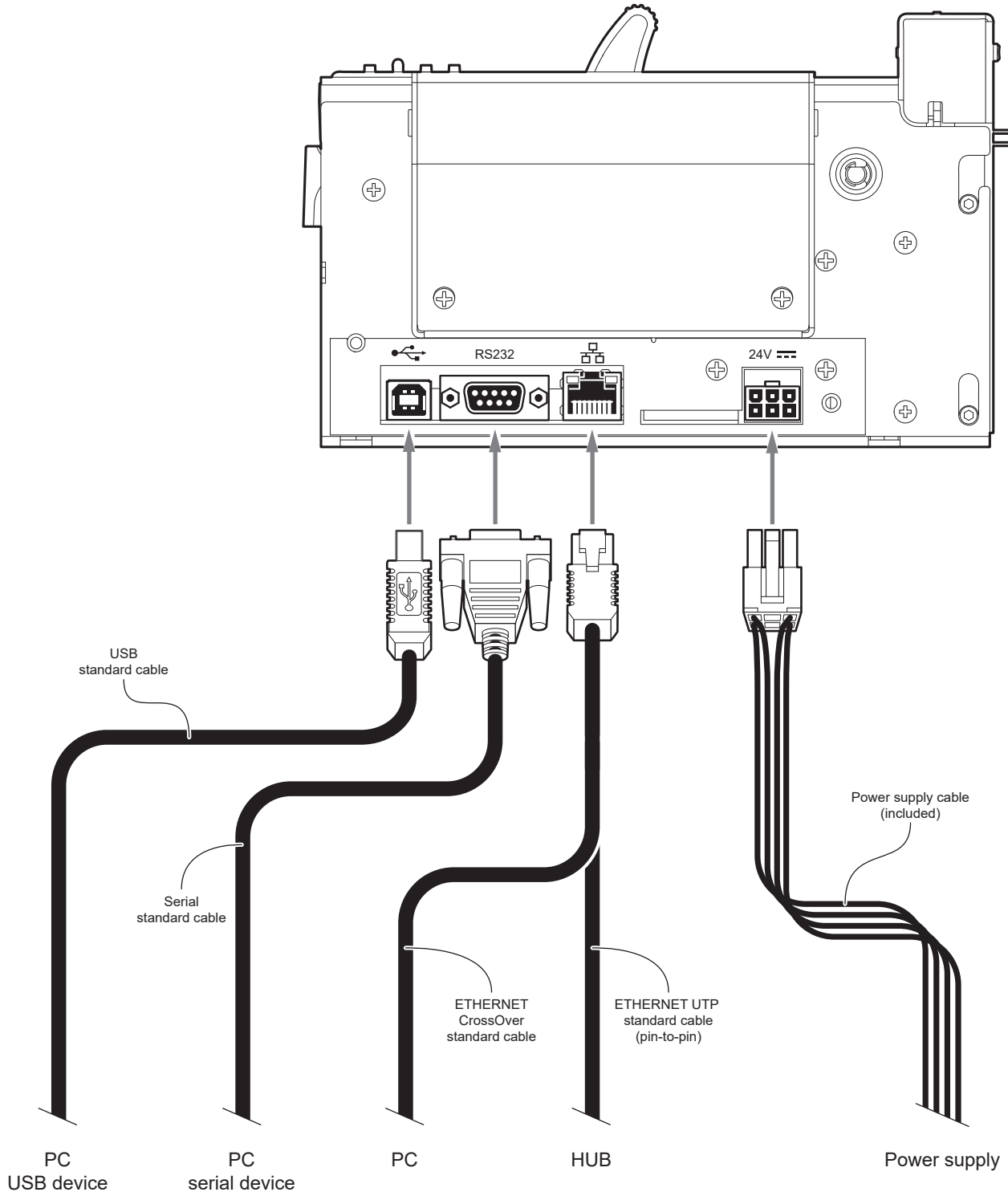
NOTE:

For ease of reference, for model with triple feeder is represented only the printer group without triple feeder.

4.5 Connections

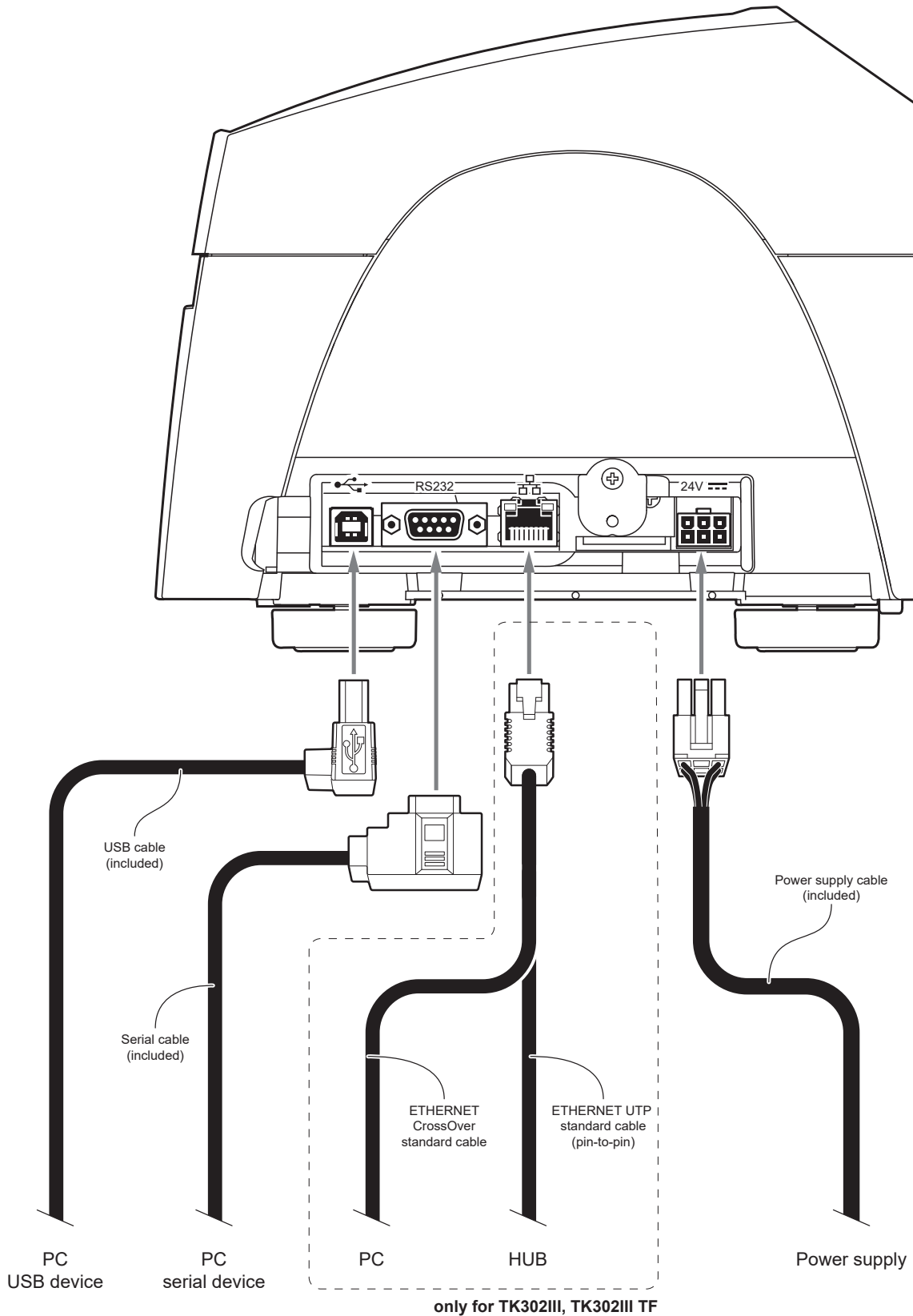
The following figure shows the possible connections for the device. When the RS232 and USB communication cables are connected to the printer at the same time, communication takes place via the USB port.

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL





TK202III, TK302III, TK302III TF



ATTENTION: In some using conditions, we recommend the installation of a ferrite core on the power supply cable.

NOTES: For ease of reference, for some models is represented only the printer group without the triple feeder.



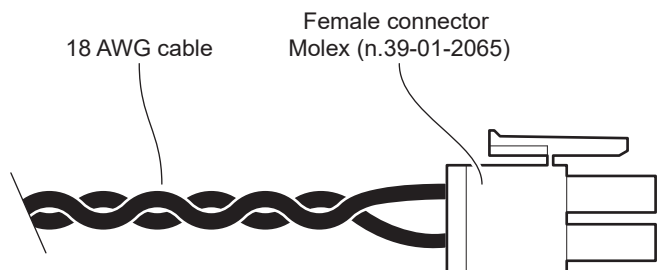
4.6 Pinout



POWER SUPPLY
Male Molex connector vertical (no. 39-30-0060)

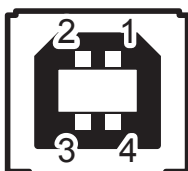
J26	1	+24 Vdc
	2	+24 Vdc
	3	+24 Vdc
	4	GND
	5	GND
	6	GND

The following figure shows the connector pinout of power supply cable:



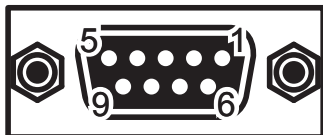
PIN	Cable color	Signal
1	Red	+24V
2	not connected	+24V
3	Red	+24V
4	Black	GND
5	not connected	GND
6	Black	GND

ATTENTION:
Respect power supply polarity.



USB INTERFACE
Female USB type B connector

J13	1	USB-VBUS (out)
	2	PD -0
	3	PD +0
	4	GND



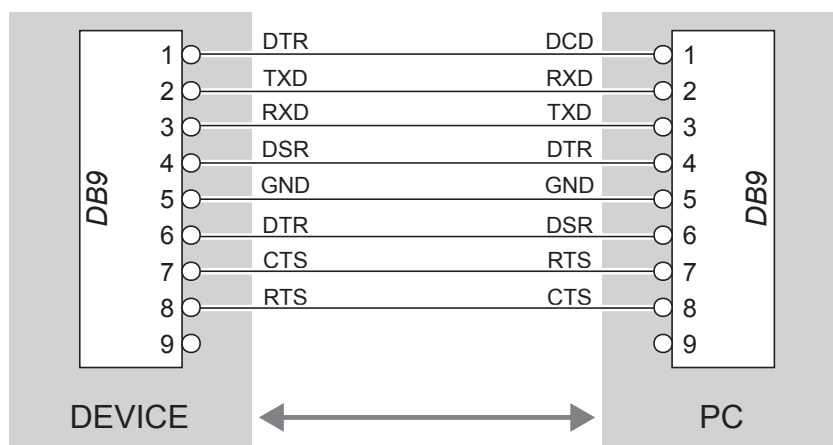
RS232 SERIAL INTERFACE

Female DB9 connector

J1	1	DCD	
	2	TX	During transmission, takes the values -VRS232 and + VRS232 depending on data
	3	RX	During reception, takes the values -VRS232 and +VRS232 depending on data
	4	DSR	
	5	GND	
	6	DTR	When +VRS232, device is power on
	7	CTS	
	8	RTS	When +VRS232, device is ready to receive data
	9	n.c.	

Given the presence of the RS232 standard, logic value "0" corresponds to the voltage value +VRS232 (voltage value between +3Vdc and +15Vdc) and logic value "1" corresponds to the voltage value -VRS232 (voltage value between -3Vdc and -15Vdc).

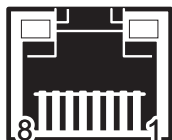
The following picture shows an example of connection between the device and a personal computer using a 9 pin RS232 serial connector:



When use a serial cable, we recommend the installation of a ferrite core on the power supply cable.



KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III, TK302III TF



ETHERNET INTERFACE

Female RJ45 connector

J16	1	TPOUT +
	2	TPOUT -
	3	TPIN +
	4	GND
	5	GND
	6	TPIN -
	7	n.c
	8	n.c
	9	+3.3 V
	10	LED-LAN
	11	+3.3 V
	12	LED-LNK
	13	Shield
	14	Shield

The functionality of two LEDs are specified in following tables:

- For 10Base-T connection:

LED	FUNCTION
LED-LNK	Link (yellow color): the LED lights up when a connection is active.
LED-LAN	Rx/Tx: (green color): the LED lights up when occurs a data reception or transmission.

- For 10/100Base-TX connection:

LED	FUNCTION
LED-LNK	The LED light (yellow color) on when a connection is active and flashes when occurs a data reception or transmission.
LED-LAN	The LED light (green color) on when occurs a 100 Mbit connection and off when occurs a 10 Mbit connection.

The device automatically recognizes the type of connection (cross or pin-to-pin).

The pinout shown in table represents the input signals to component J1 before the isolation voltage transformer (through-hole pin).



4.7 Driver and SDK

The drivers for the following operating system are available in the website www.custom4u.it.

OPERATING SYSTEM	DESCRIPTION	INSTALLATION PROCEDURE
Windows	Driver for Windows XP	From the START menu, press Run and type-in the path where the SW was saved on your PC, then click OK. Follow the instructions that appear on the screen to install the driver.
	Driver for Windows VISTA (32/64bit)	
	Driver for Windows 7 (32/64bit)	
	Driver for Windows 8 (32/64bit)	
	Driver for Windows 8.1 (32/64bit)	
	Driver for Windows 10 (32/64bit)	
	Driver for Virtual COM (32/64 bit) with or without silent installation (see paragraph 6.6)	
Driver for OPOS		
Linux	Driver for Linux (32/64bit)	Follow the instruction get back on the README.TXT file. You can find it in the software package downloaded in advance.
Android	SDK for CustomAndroidAPI	Extract the zipped folder to the destination path desired. Follow the instructions present in the software package that you downloaded on how to install and use the SDK.
iOS	SDK for CustomiOSApi	Extract the zipped folder to the destination path desired. Follow the instructions present in the software package that you downloaded on how to install and use the SDK.

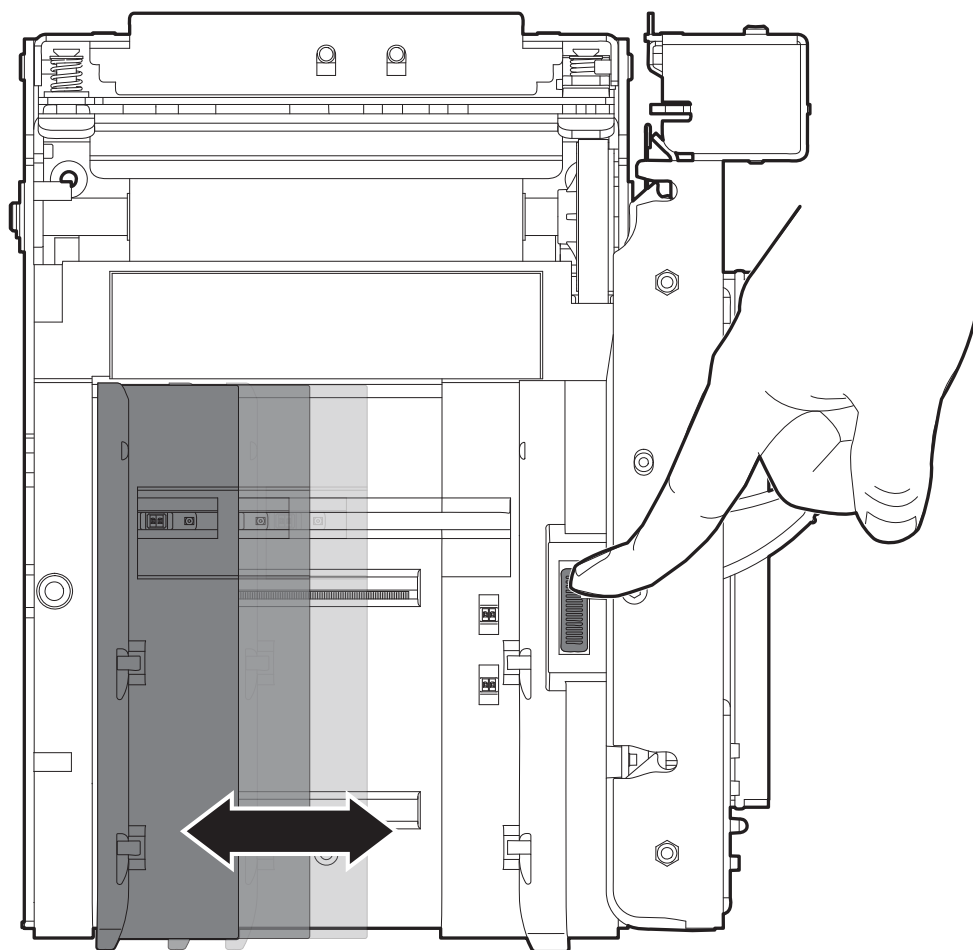


5 OPERATION

5.1 Adjusting paper width

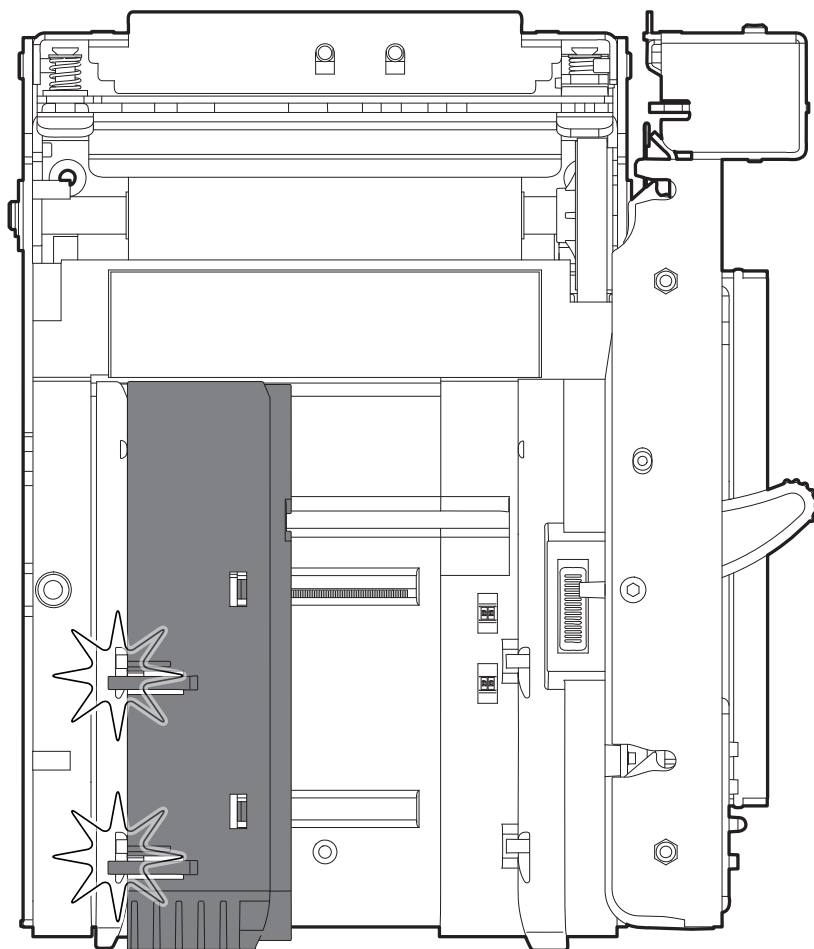
KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
TK202III, TK302III

Paper width may be adjusted from 40 mm to 82.5 mm by pressing the unlocking button and moving the adjustable paper guide as shown in the figure.





To manage paper width from 20 mm to 40 mm, apply the spacer provided with the device on the adjustable paper guide (see following figure), then adjust the paper width.



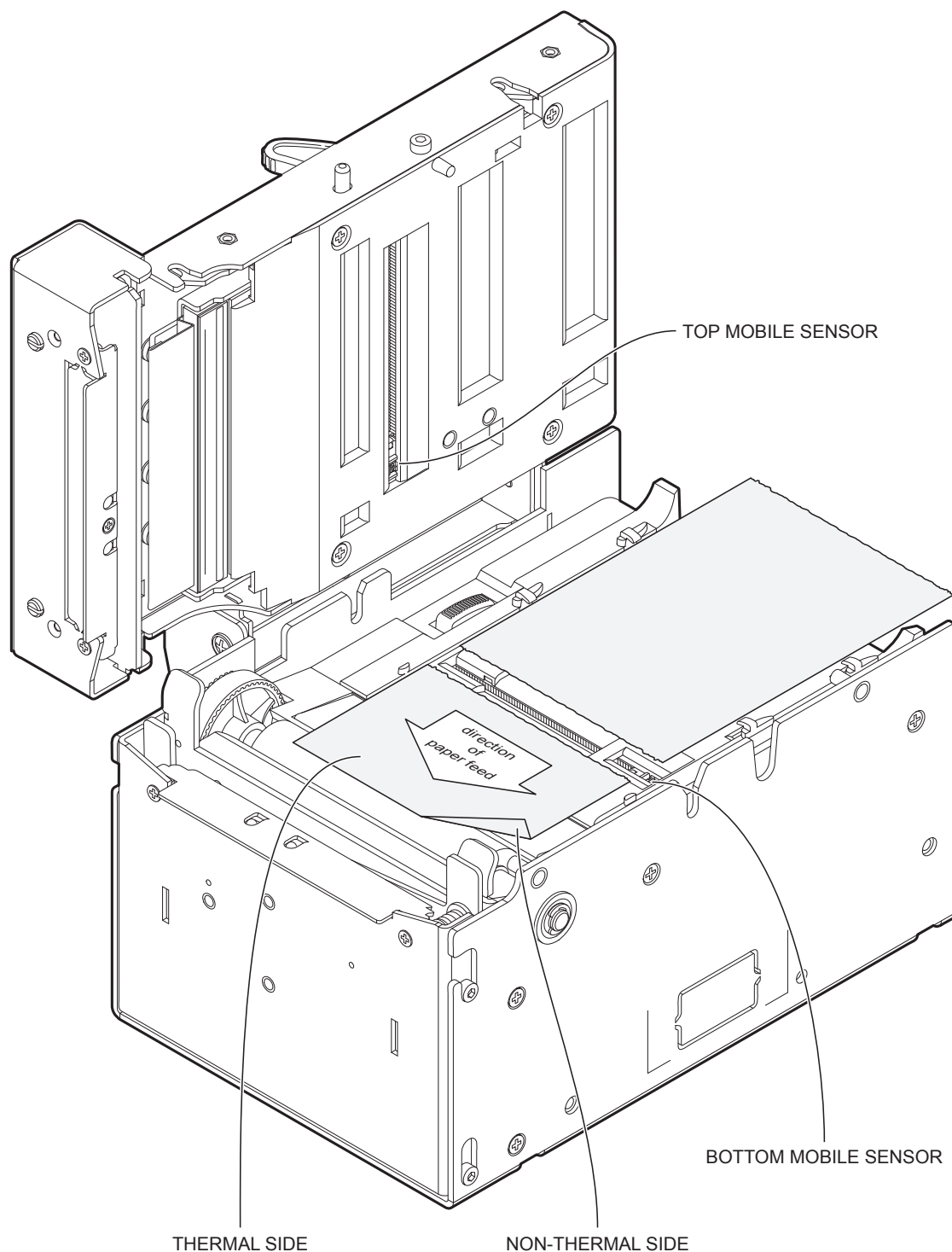
NOTE:

For ease of reference, it is represented only the internal printer without external chassis.

5.2 Adjusting the alignment sensors

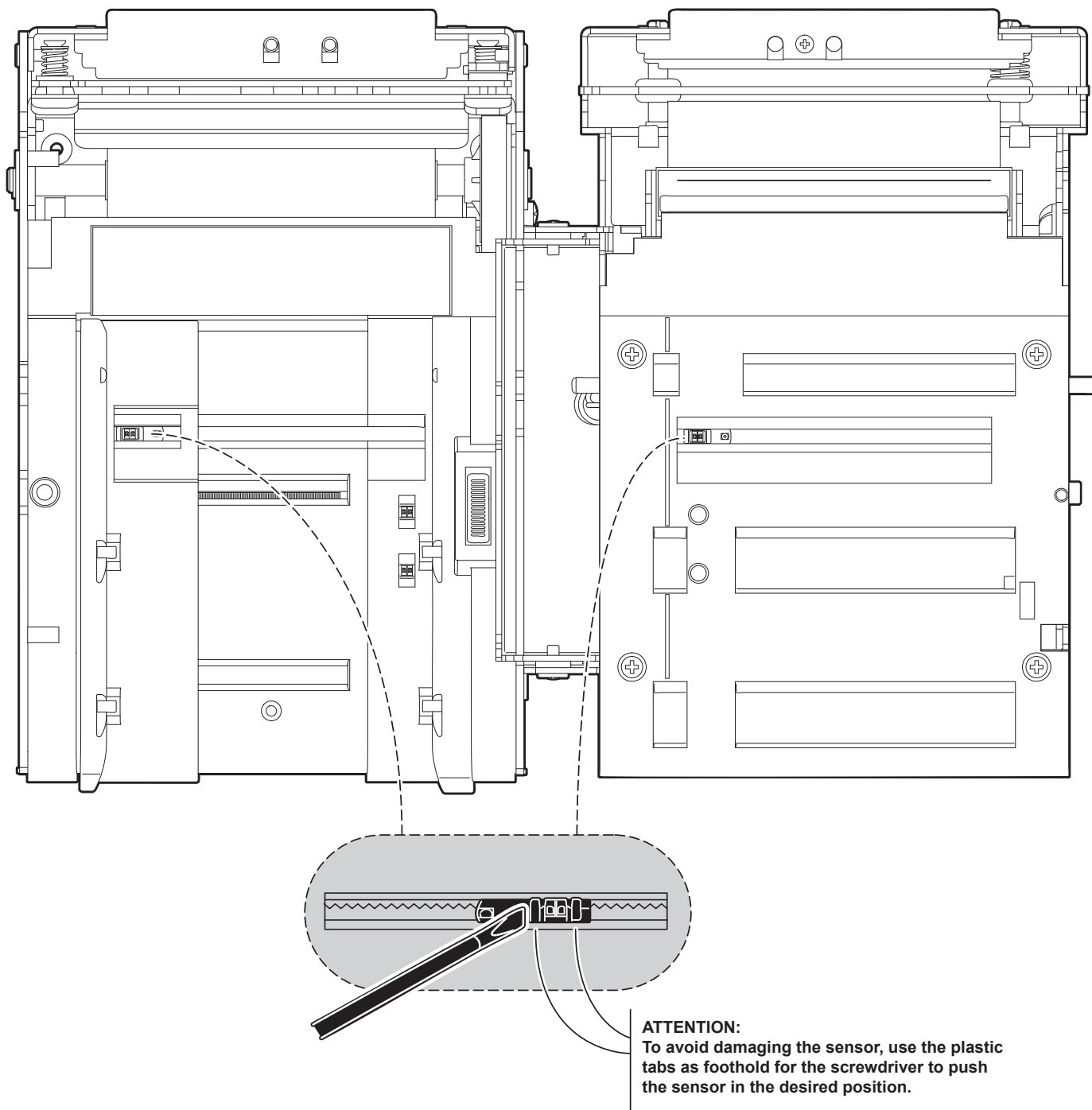
The device is equipped with two mobile sensors for the detection of the alignment black mark placed both on the thermal side and on the non-thermal side of paper as shown in the following figure.

The device user will need to manually move these mobile sensors according to the position and the type of the black mark on the paper. To use these sensors, you must set the “Black mark position” parameter on the correct value (see [chapter 6](#)).





To adjust the mobile sensors position according to the black mark position and the type on paper, open the device cover and move the sensors to the desired position using a small screwdriver or a pointed object.



NOTES:

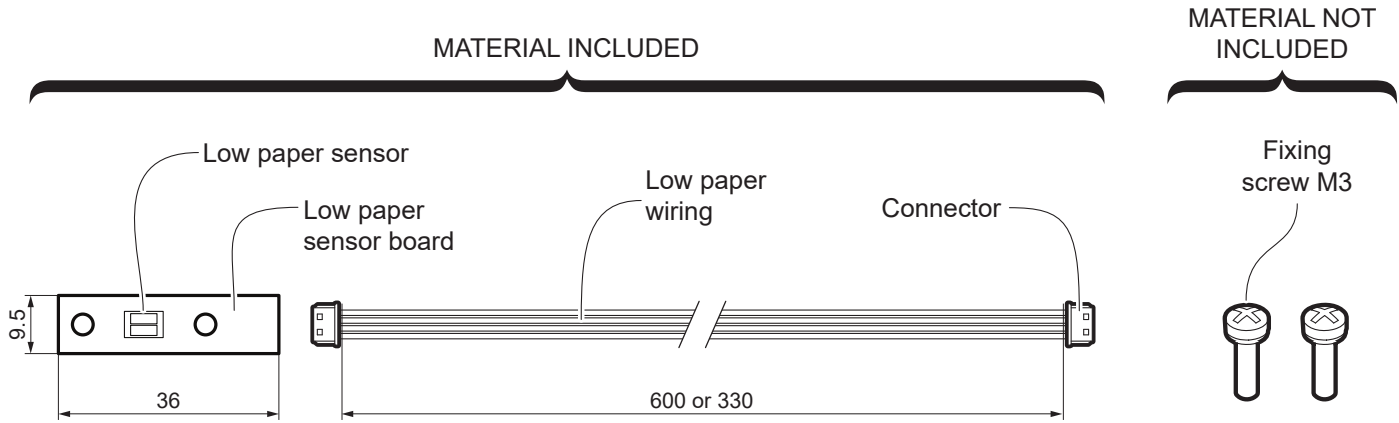
For ease of understanding, the image shows the two flats represented in the same plane and, for some models, only the internal printer group is represented without external chassis or triple feeder.



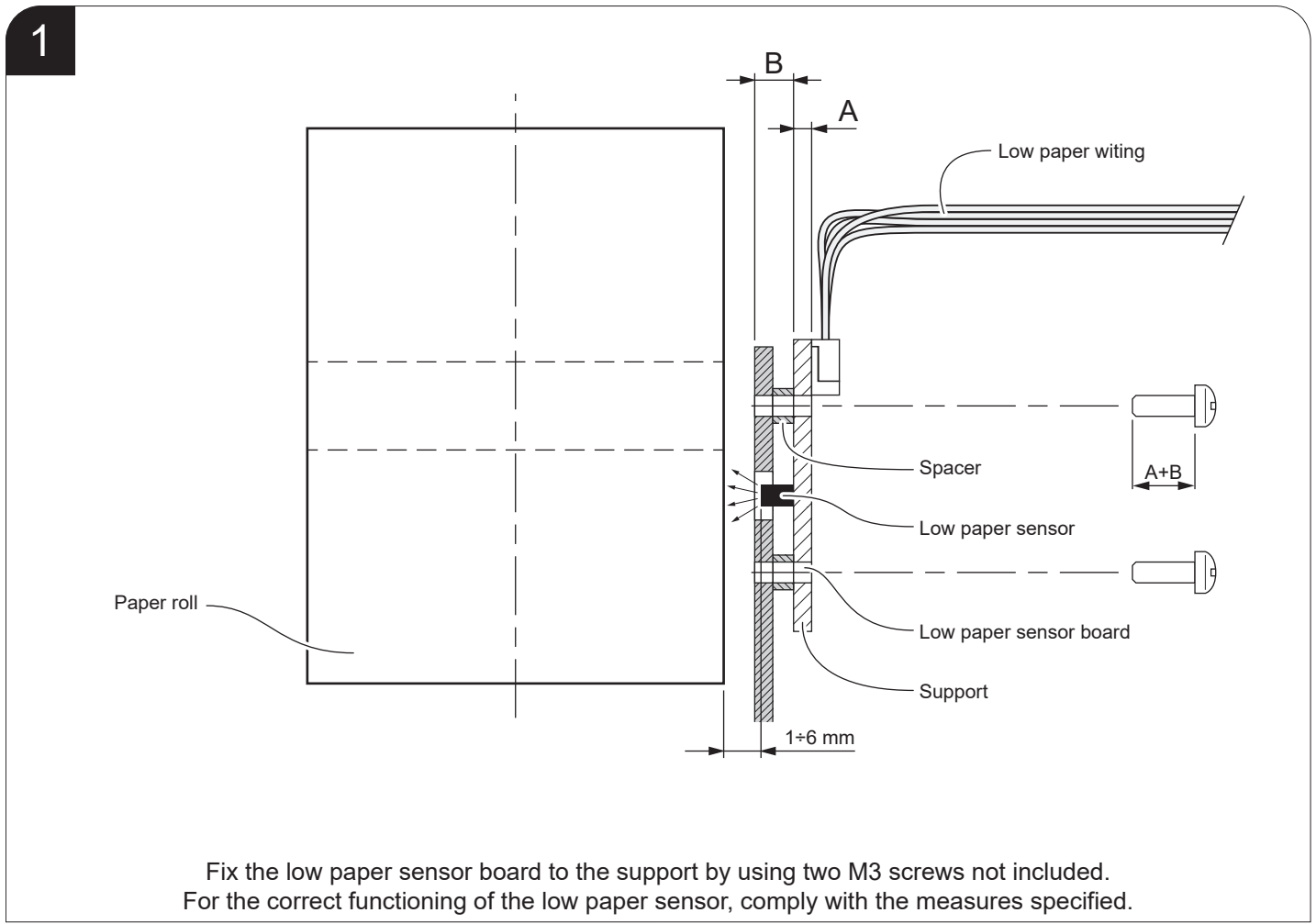
5.3 Low paper sensor

The device provides as accessories (see chapter 11) two kits which include a low paper sensor with the cable (see following figure). To fix the sensor, use an M3 screw not supplied.

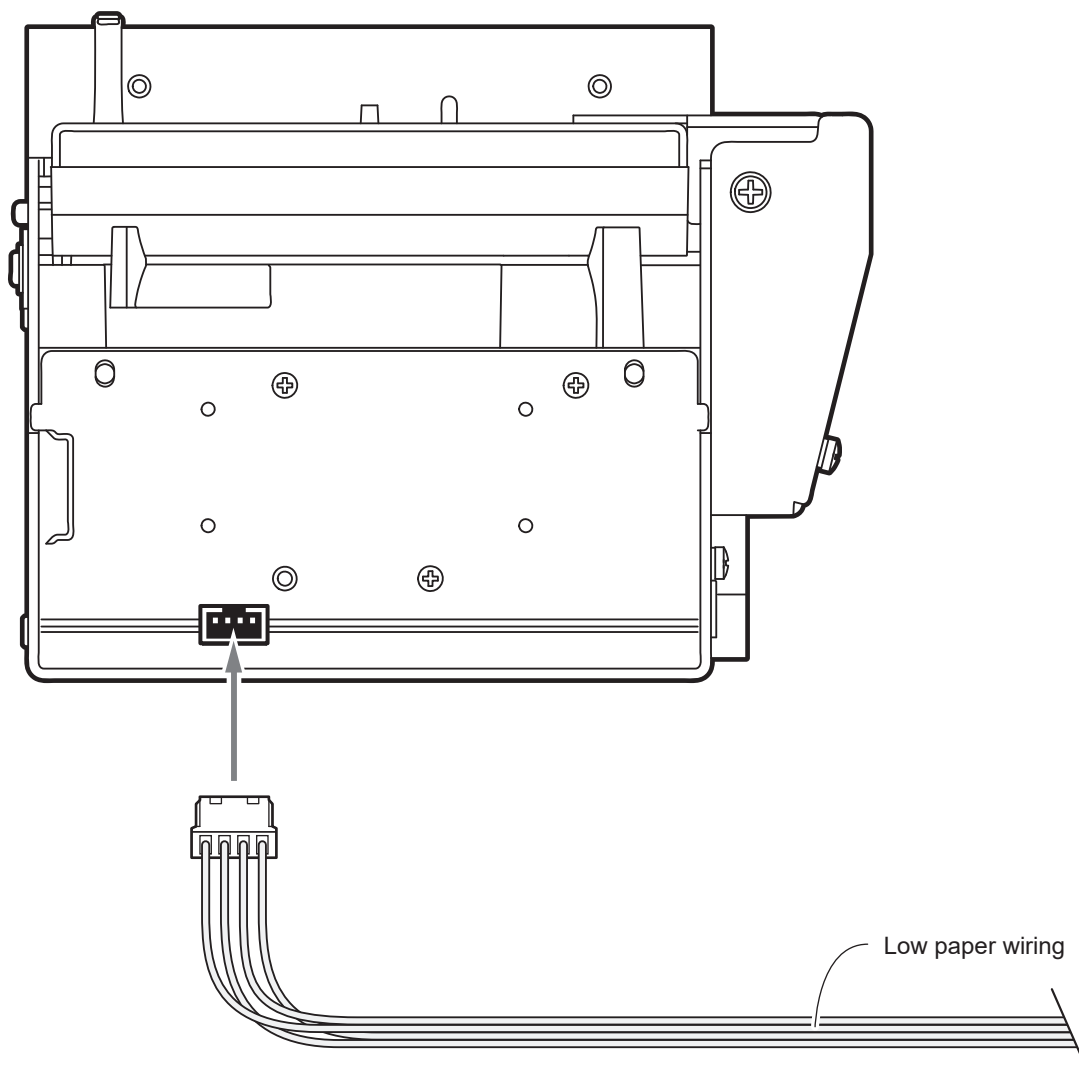
All the dimensions shown in following figures are in millimetres.



For the assembly procedure, proceed as follows:



2



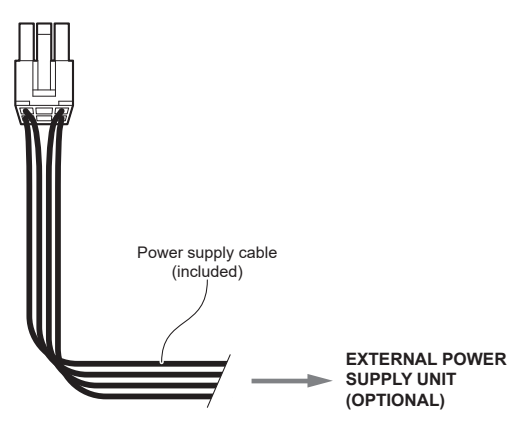
Connect the wiring coming from the low paper sensor board at the connector shown in figure.



5.4 Switch the device on

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL

1

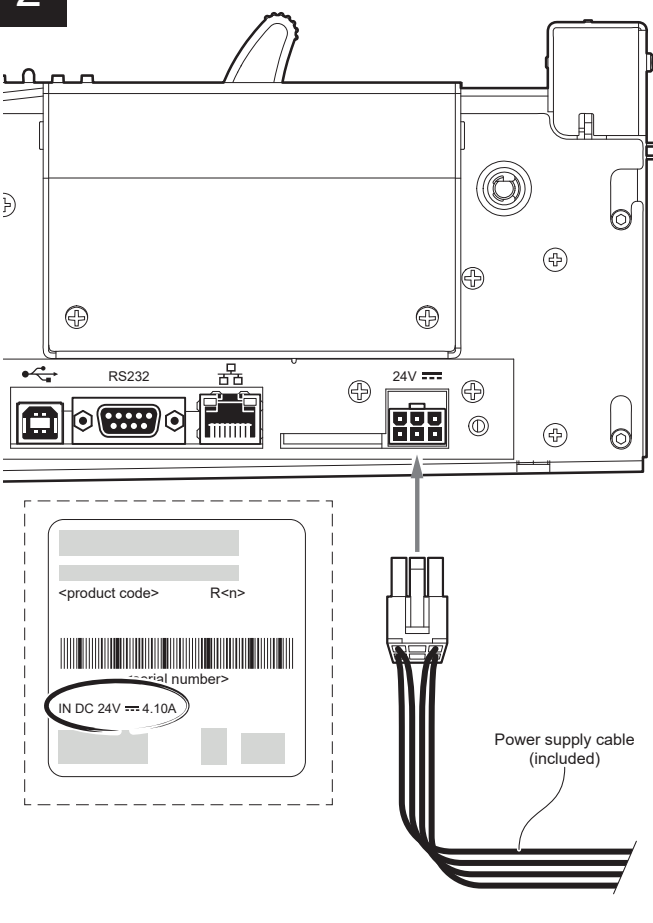


Power supply cable (included)

EXTERNAL POWER SUPPLY UNIT (OPTIONAL)

Connect the power supply cable to an external power supply unit.

2



RS232

24V

<product code> R<n>

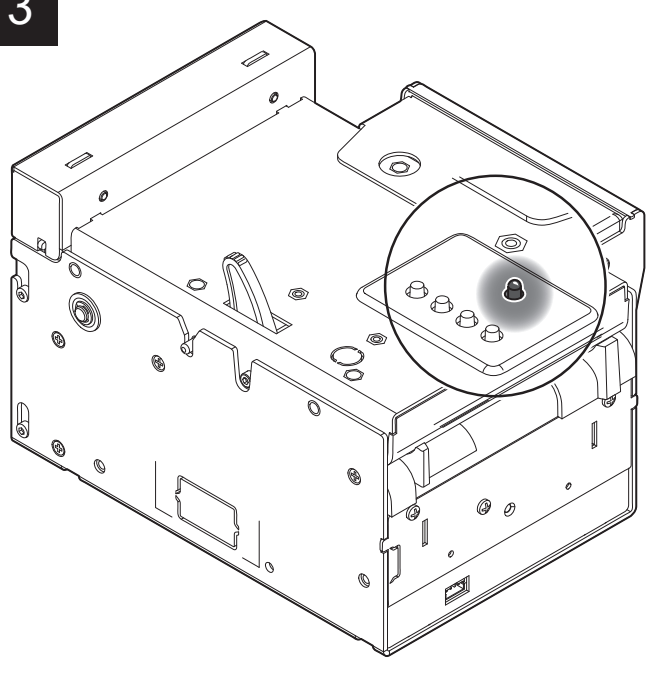
serial number>

IN DC 24V 4.10A

Power supply cable (included)

Connect the power supply cable to the device.
Use the type of electrical power supply indicated on the label.

3

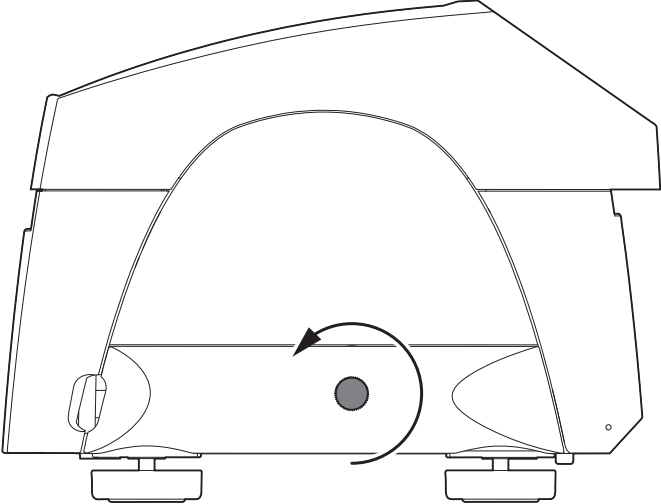


The green LED turn on and the device is ready.



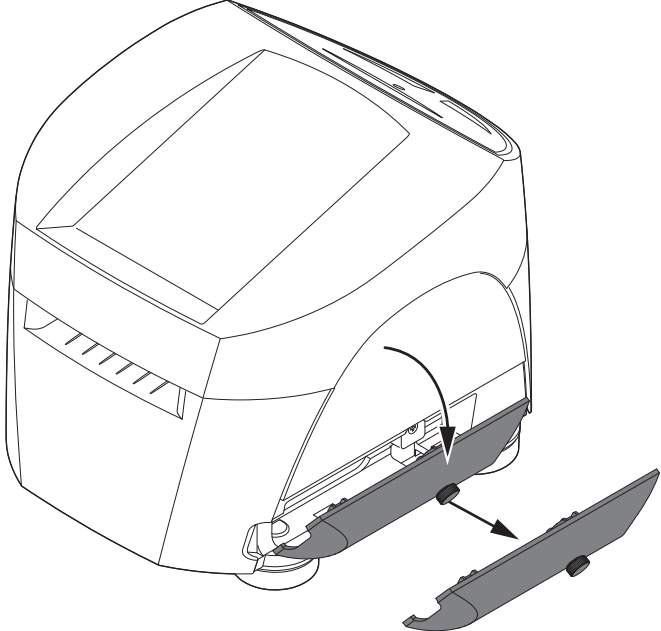
TK202III, TK302III, TK302III TF

1



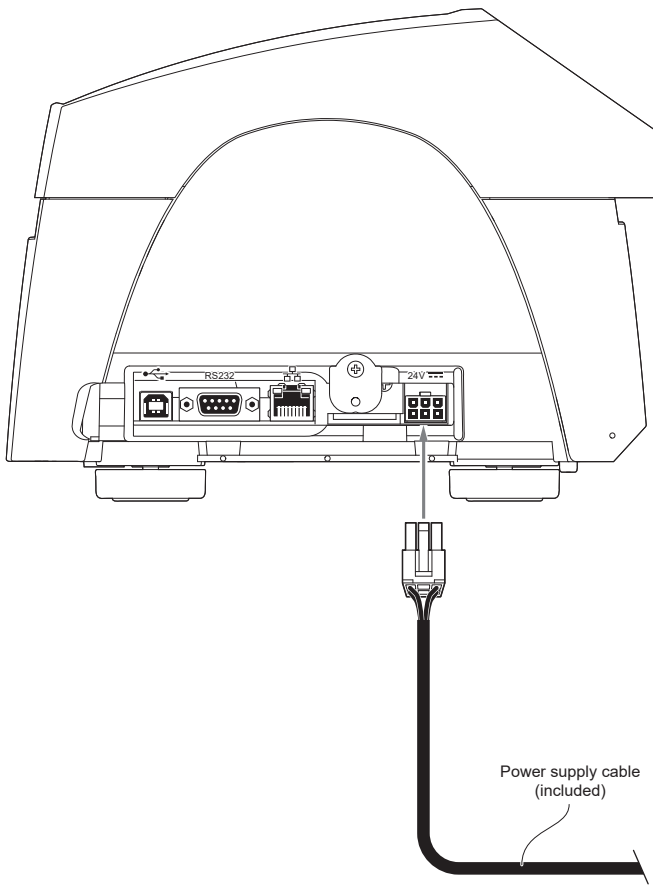
Rotate the captive knob to unlock the connectors cover.

2



Remove the connectors cover.

3



Power supply cable (included)

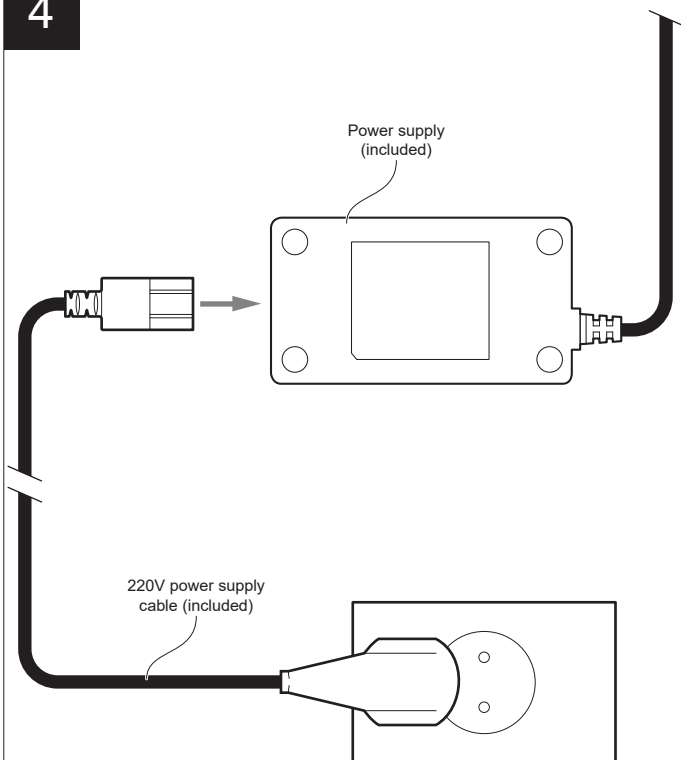
<product code> R<n>

serial number>

IN DC 24V 4.10A

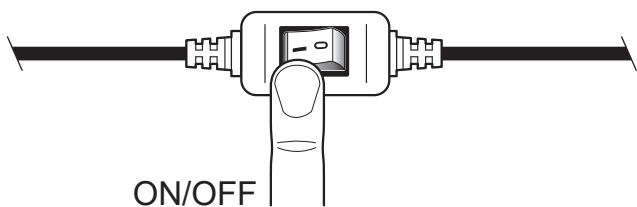
Connect the power supply cable to the device.
Use the type of electrical power supply indicated on the label.

4



Connect the 220V power supply cable to the power supply unit and to outlet.

5



Switch the device on by pressing the ON/OFF key on the power supply cable.

6



The display turns on with the standby message.
The device is ready.

NOTE:

For ease of reference, it is represented only the printer group without triple feeder.

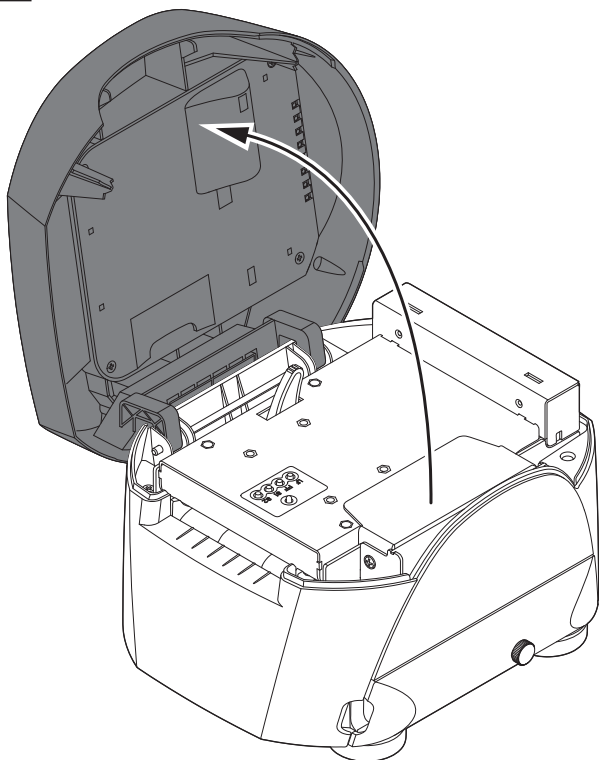


5.5 Loading the paper roll

To change the paper proceed as follows. At every change of paper, check inside the device to locate and remove any scraps of paper.

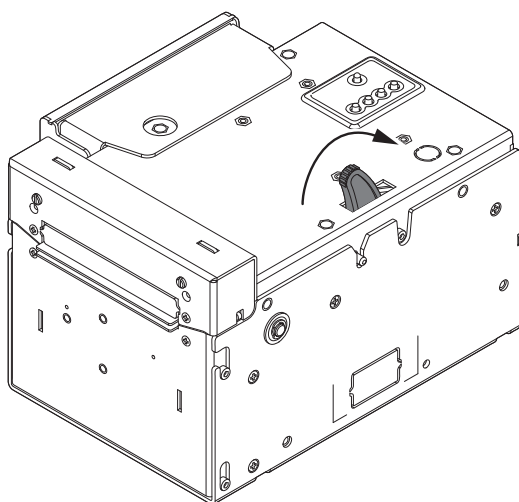
KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
TK202III, TK302III

1 **TK202III, TK302III**



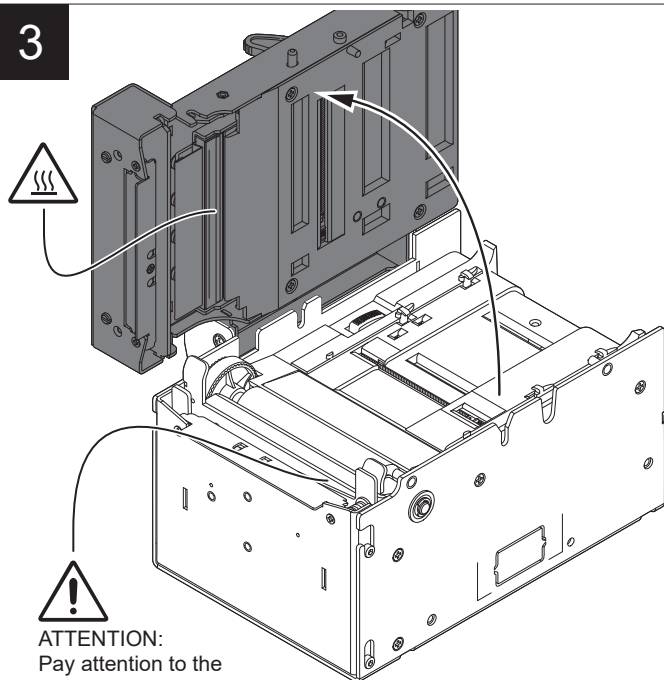
Open the upper plastic cover.

2



Push the opening lever in the direction shown in the figure.

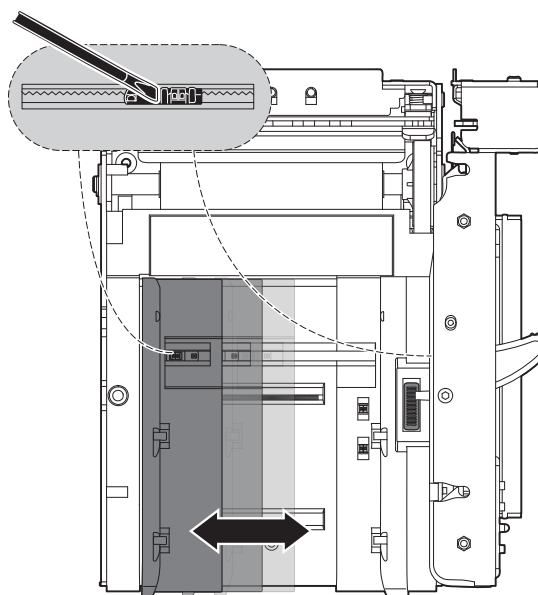
3



ATTENTION:
Pay attention to the exposed cutter blade.

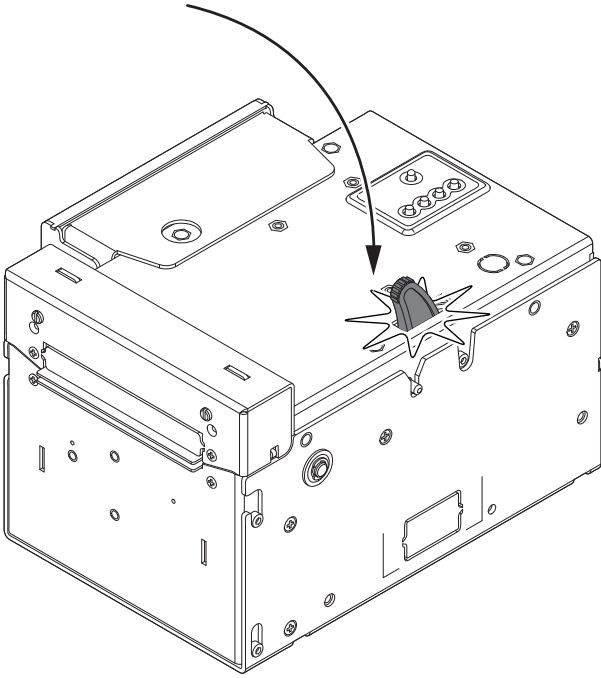
Open the upper cover of the device.

4



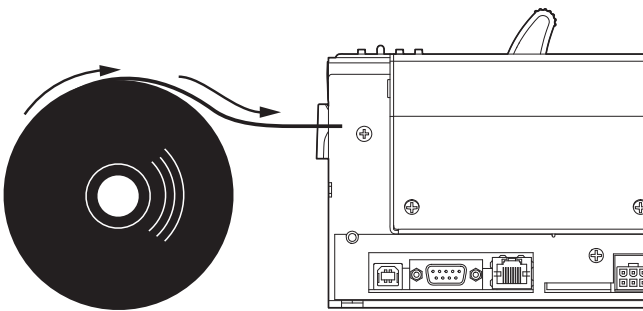
Adjust the paper width and the position of the black mark sensors (see [paragraph 5.1](#) and [paragraph 5.2](#)).

5



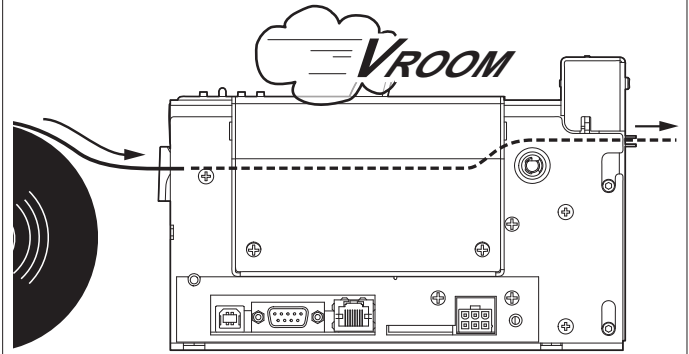
Close the upper cover of the device.

6



Insert the paper into the input mouth so that it unrolls correctly. Be sure that the paper is correctly positioned into paper guides.

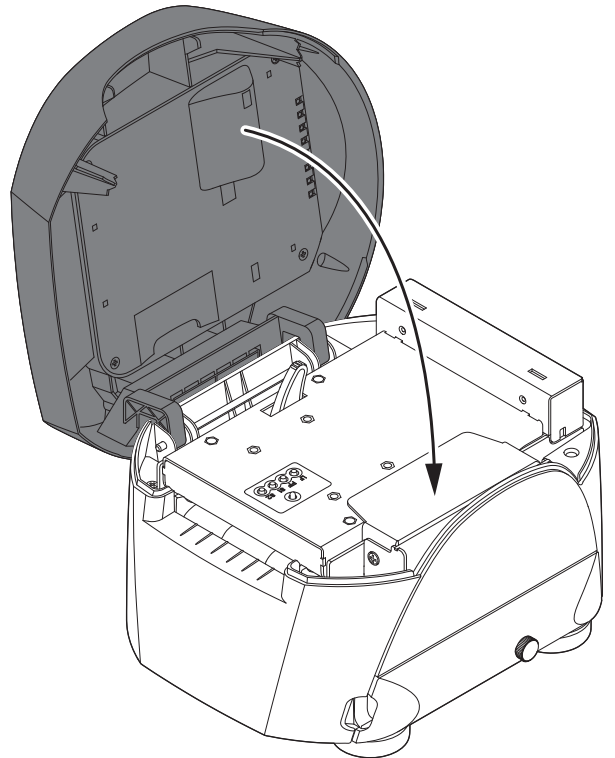
7



Wait until the paper is automatically loaded.

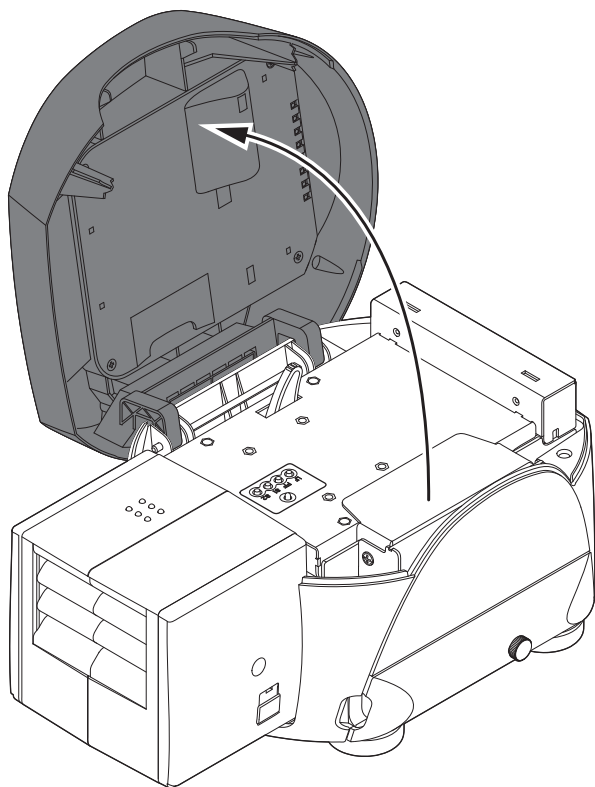
8

TK202III, TK302III



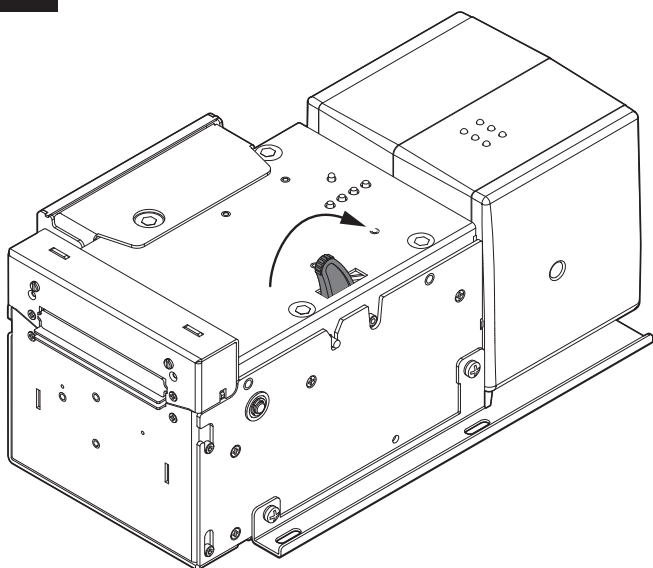
Close the upper plastic cover.

1 TK302III TF



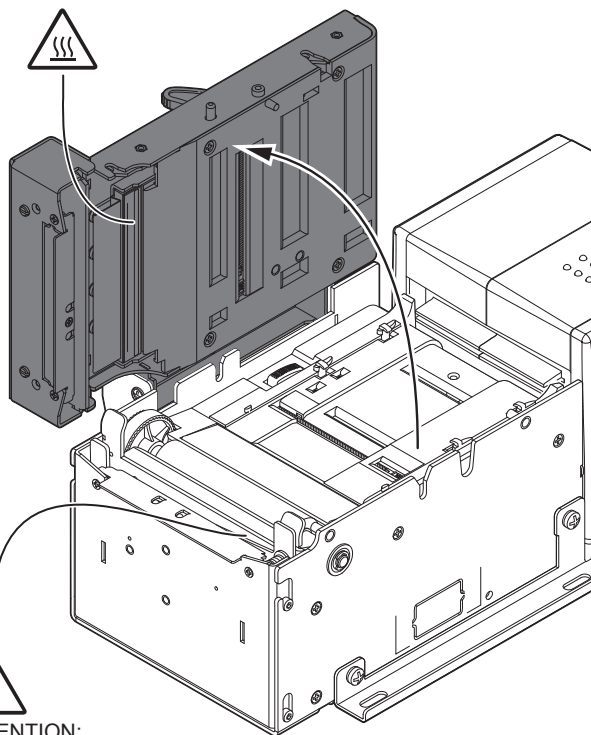
Open the upper plastic cover.

2



Push the opening lever in the direction shown in the figure.

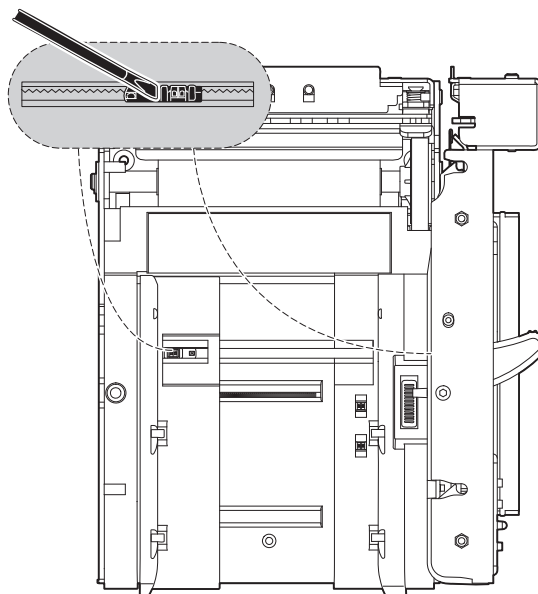
3



ATTENTION:
Pay attention to the exposed cutter blade.

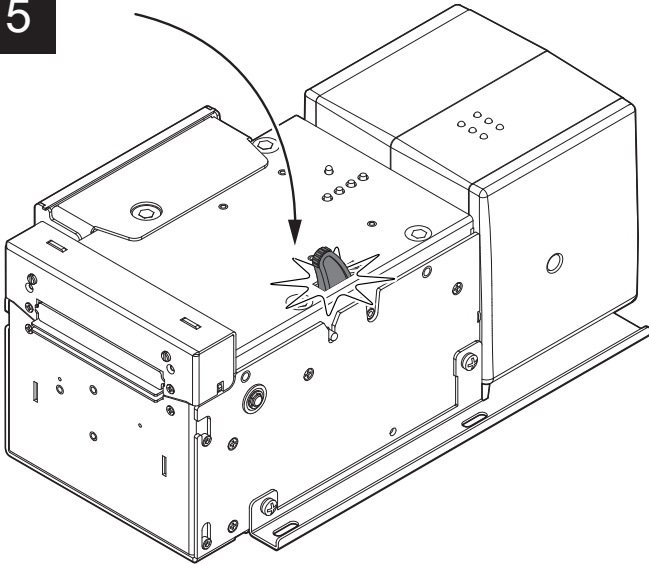
Open the upper cover of the device.

4



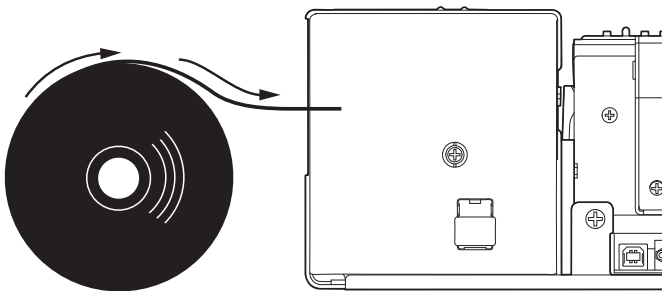
Adjust the paper width and the position of the black mark sensors (see [paragraph 5.1](#) and [paragraph 5.2](#)).

5



Close the upper cover of the device.

6

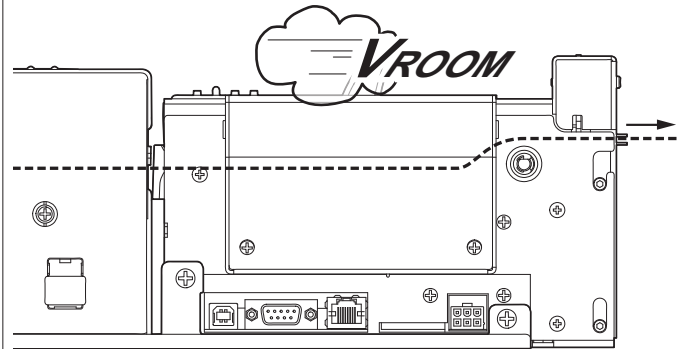


ATTENTION:

In case of ticket with TAG RFID, is recommended to insert the ticket into the central feeder (paper input feeder 2). The use of paper inputs 1 and 3 causes a slight bending of paper and therefore the integrity of the TAG RFID is not guaranteed. Before proceeding, check with a sample ticket.

Insert the paper into on of the input feeder so that it unrolls correctly. Be sure that the paper is correctly positioned into paper guides.

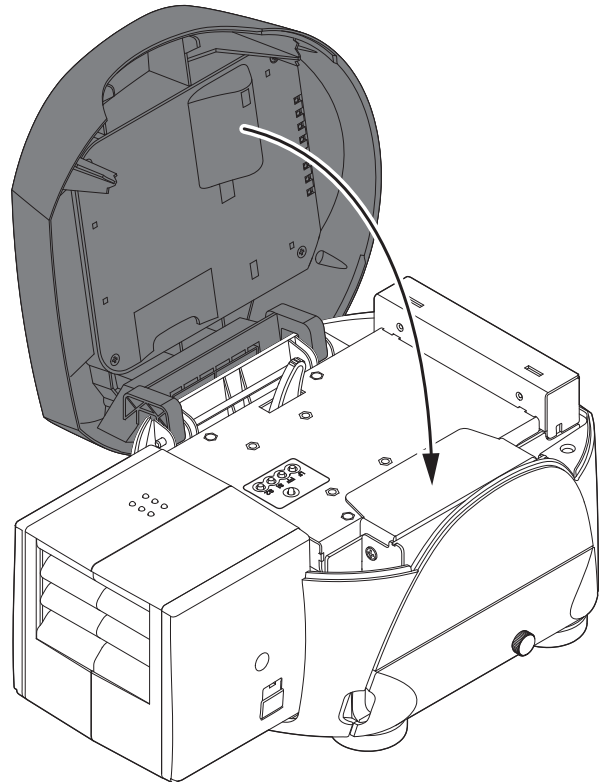
7



Wait until the paper is automatically loaded.

8

TK302III TE



Close the upper plastic cover.

5.6 Issuing ticket

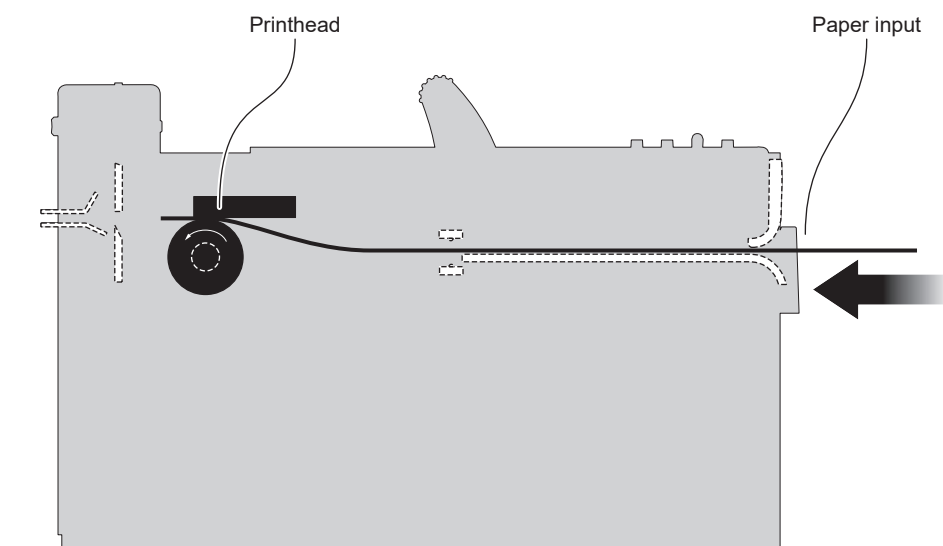
The device allows you to choose between different operating modes for the issuance of printed tickets. The operating modes shown in following images, depend on the settings of configuration parameters and commands sent to the device.

NOTE: For ease of reference, for some models is represented only the internal printer group without external chassis or triple feeder.

Standard mode

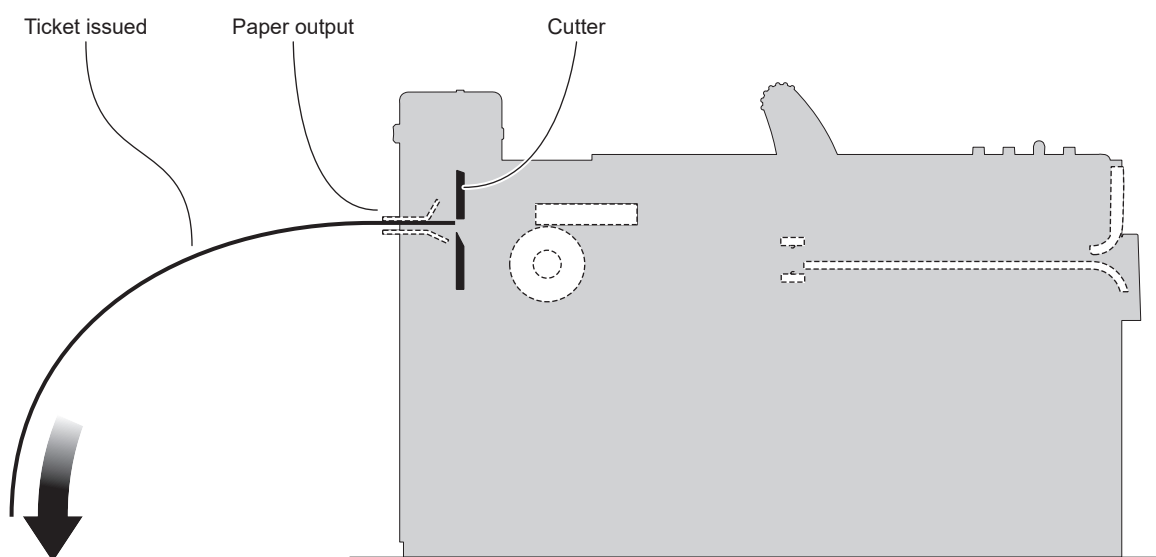
(KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL, KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III, TK302III TF)

1



The device starts the ticket printing.

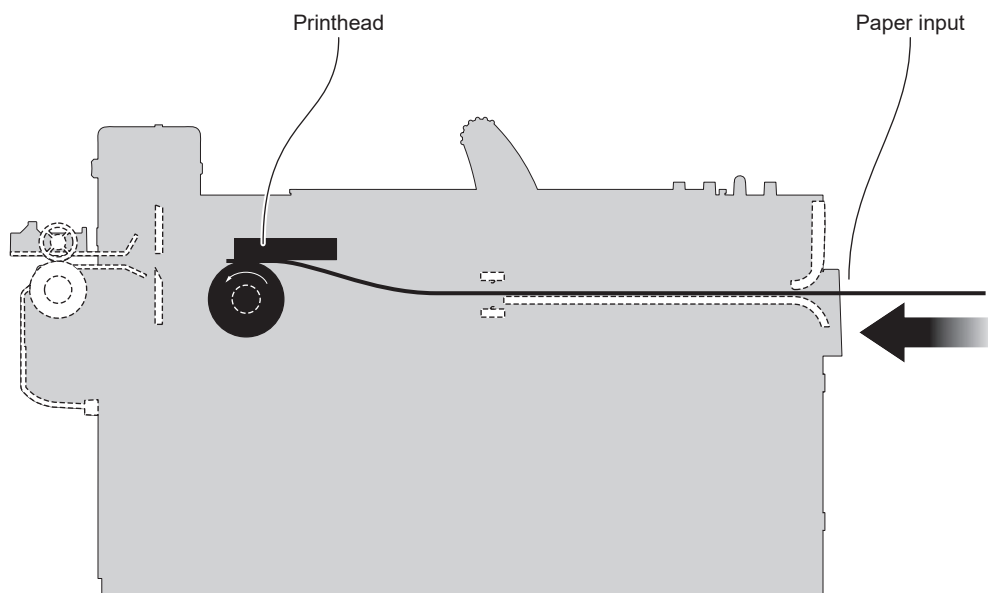
2



When printing ends, the device cuts the ticket printed that is issued from the paper output.

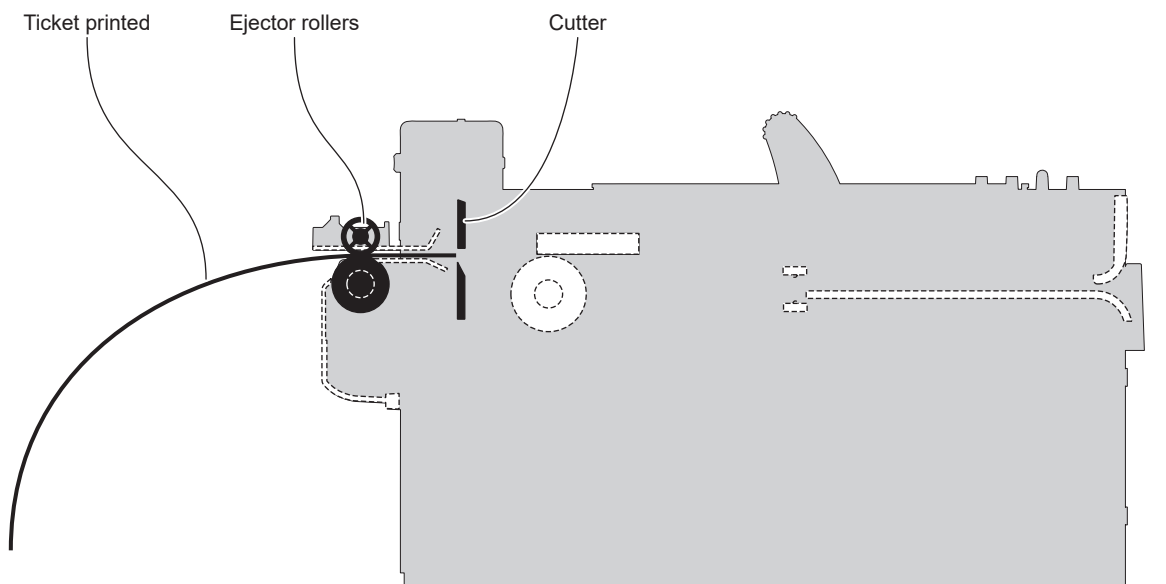
“PRESENT” mode (KPM302III EJ, KPM302III TF-EJ)

1



The device starts the ticket printing.

2

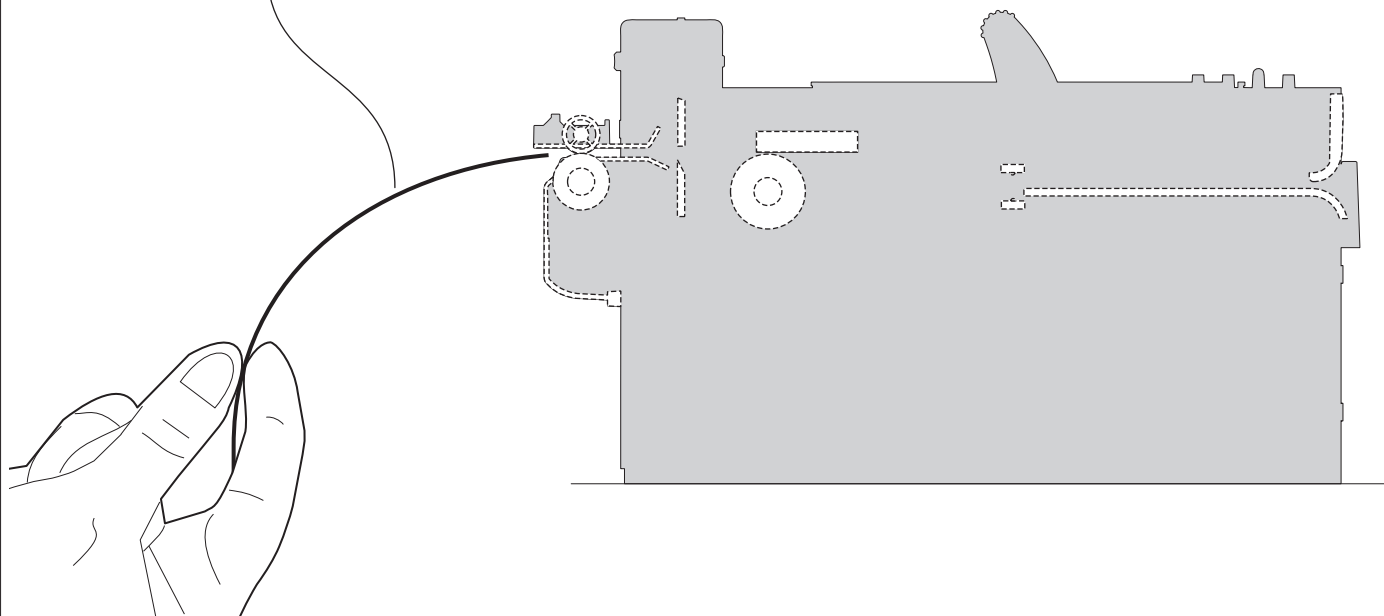


When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.



3

Ticket withdrew

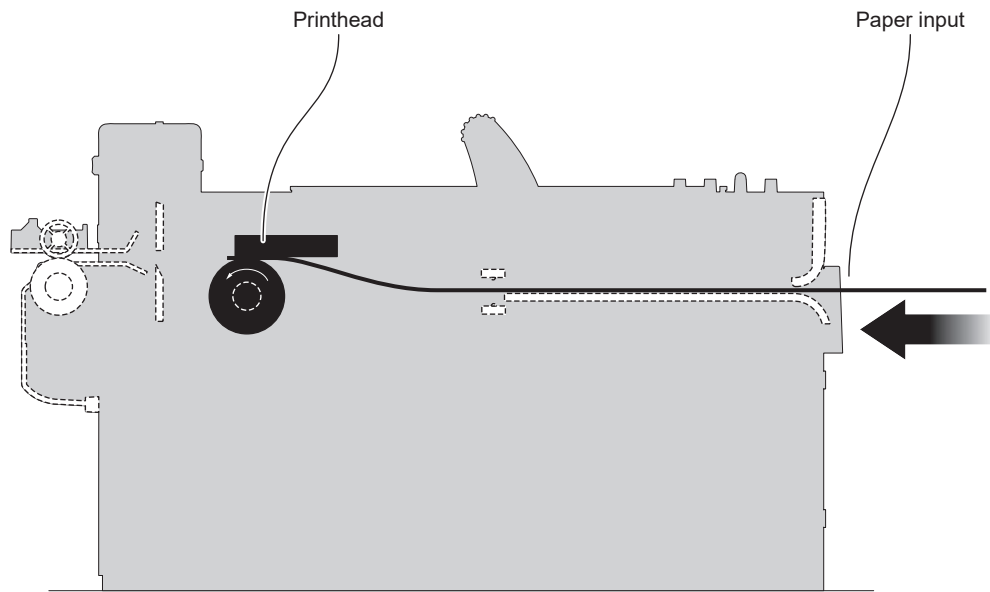


The user withdraws the ticket printed.



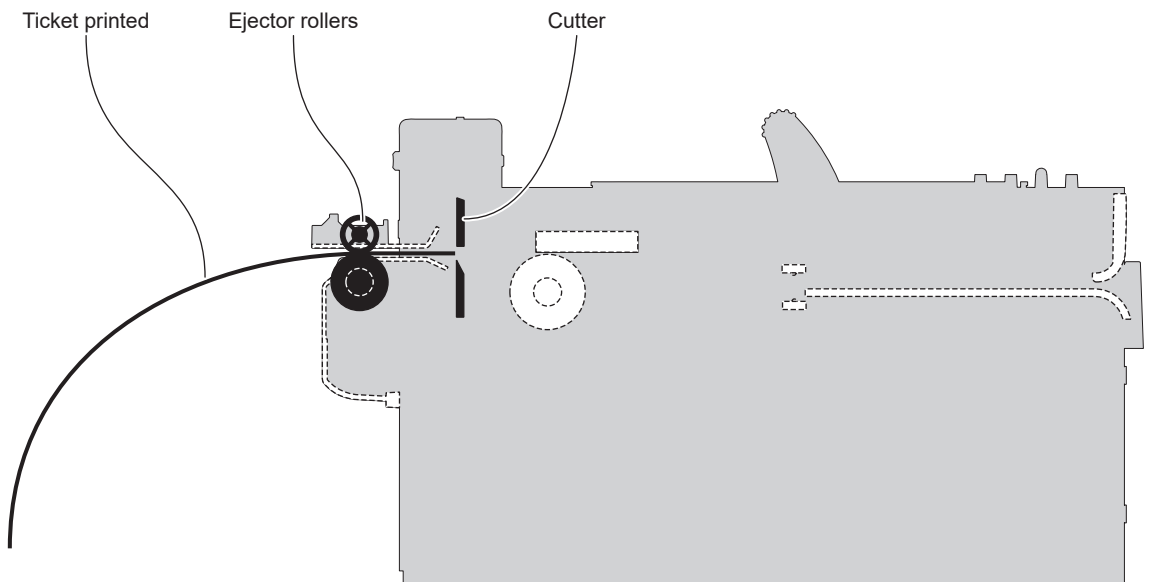
“EJECT” mode (KPM302III EJ, KPM302III TF-EJ)

1



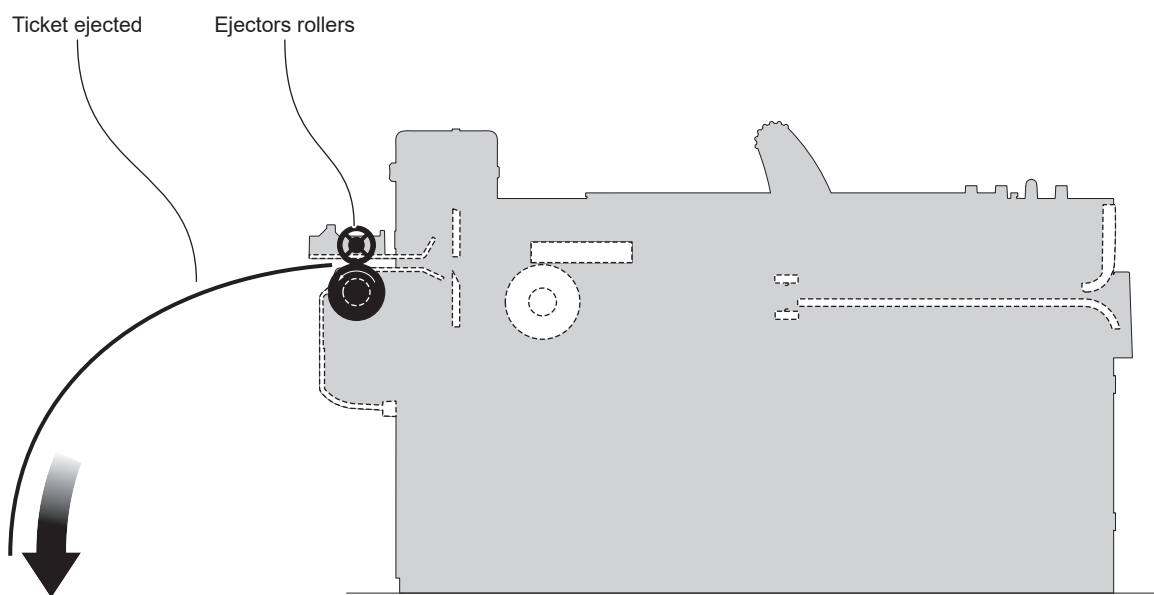
The device starts the ticket printing.

2



When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.

3



The device ejects the ticket printed.

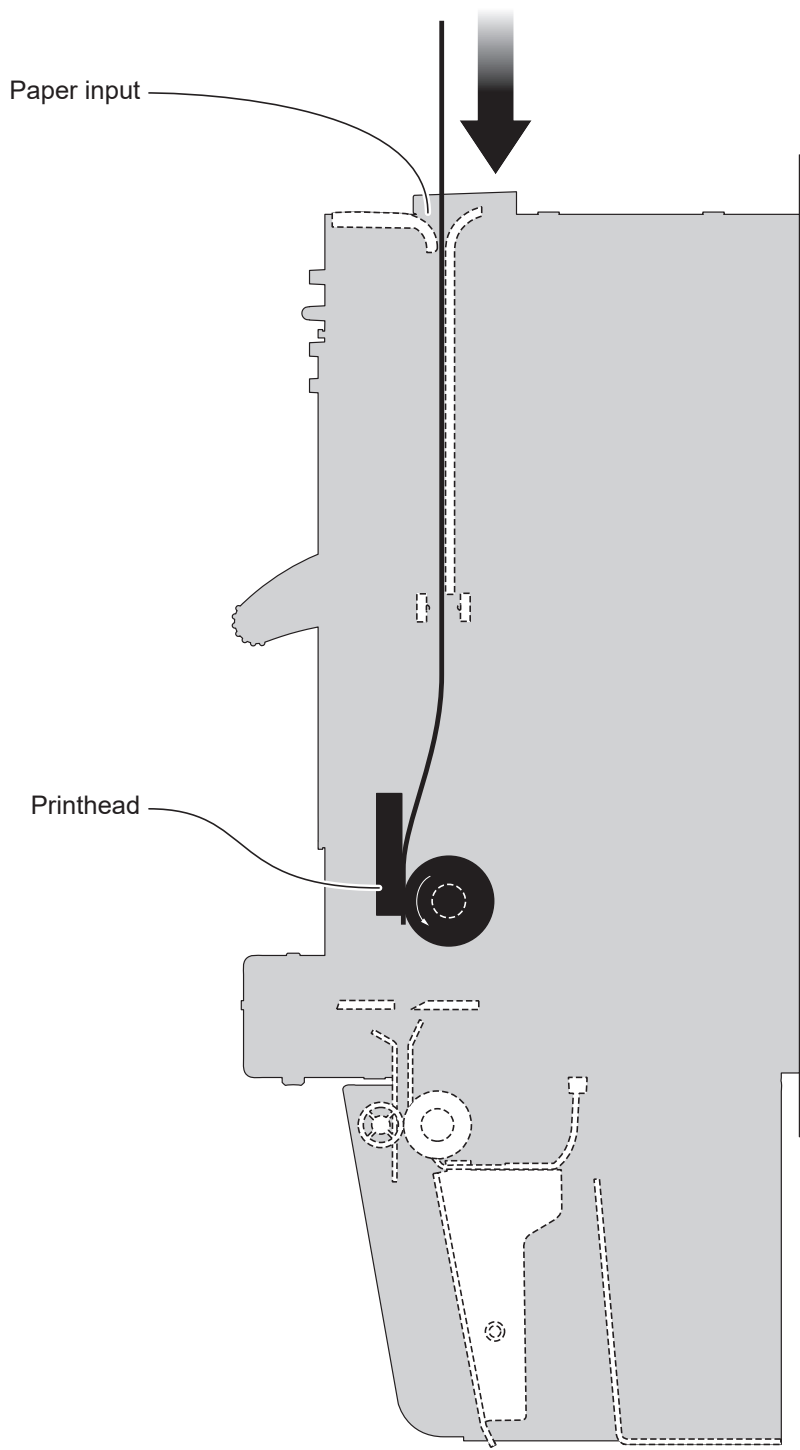
NOTE:

To enable this issuing method, you need to correctly set the operation mode of the ejector device with the command `0x1D 0x65 0x05` (refer to the commands manual of the device).



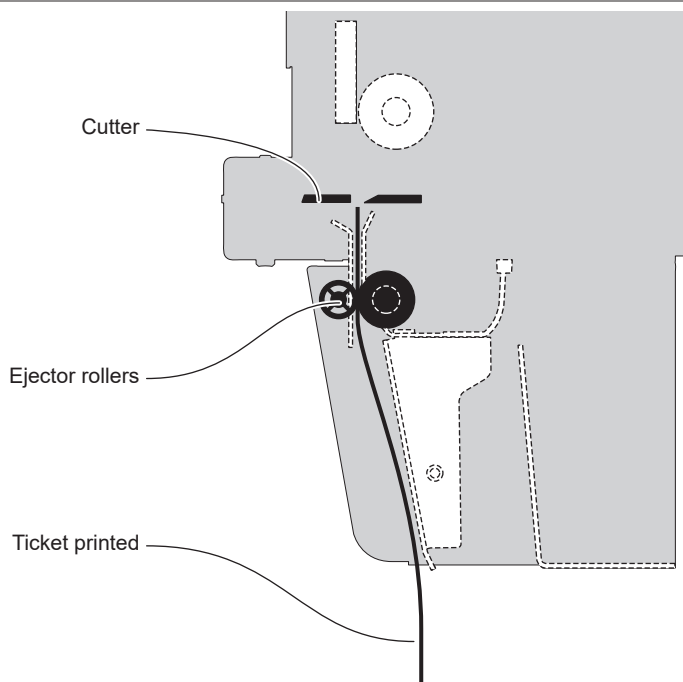
“PRESENT” mode (KPM302III vSEL)

1



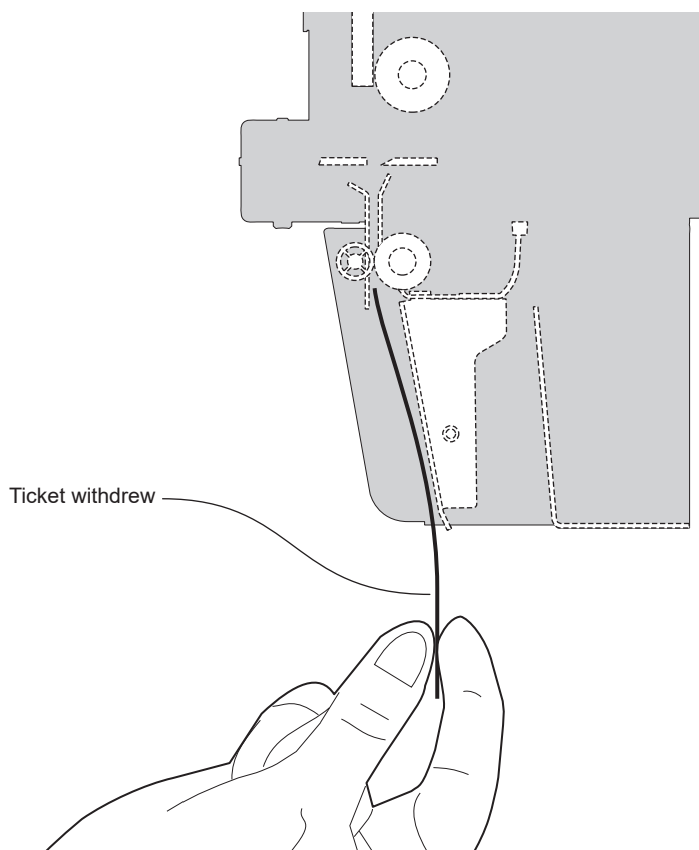
The device starts the ticket printing.

2



When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.

3



The user withdraws the ticket printed.

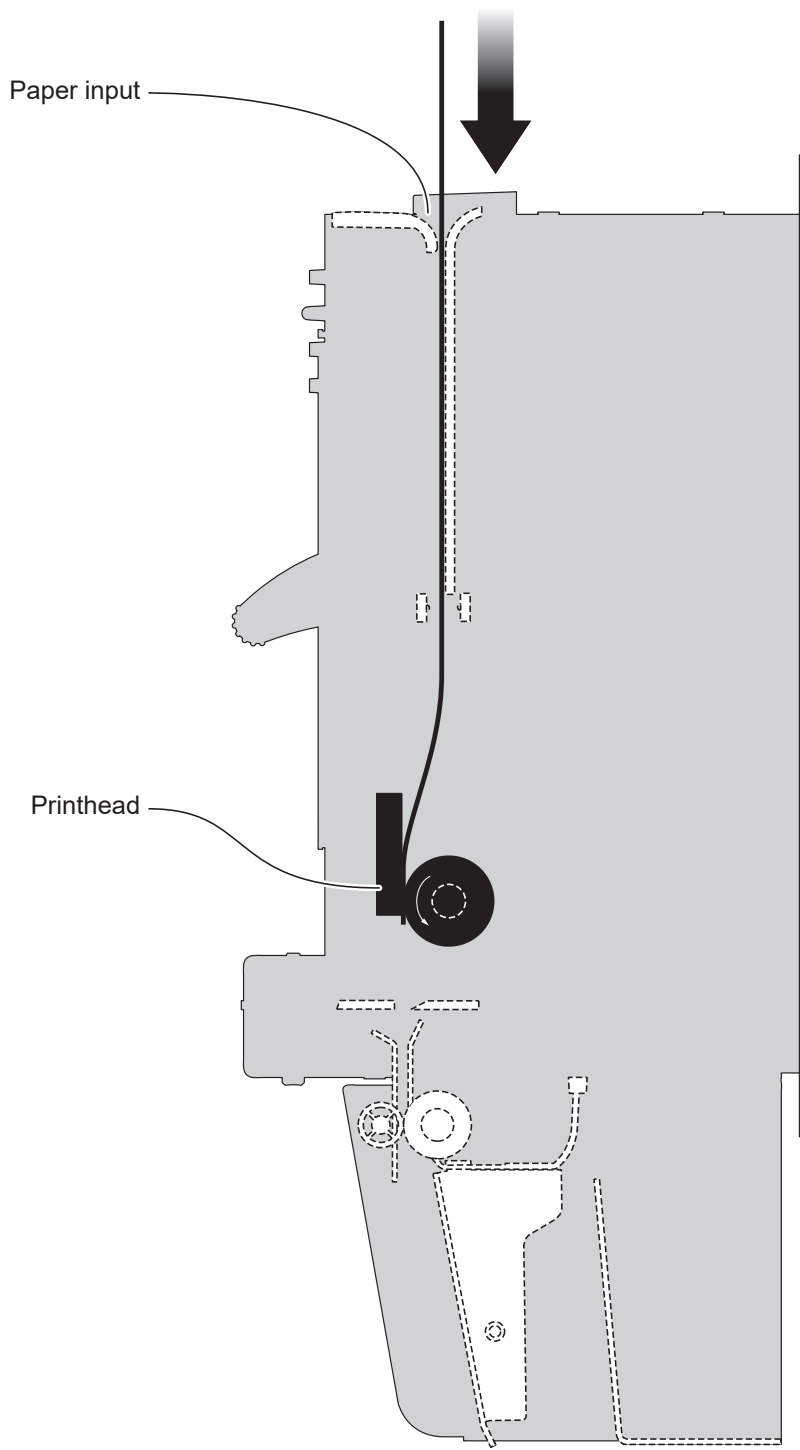
NOTE:

To enable this issuing method, you need to correctly set the operation mode of the selector device with the command 0x1D 0x70 0x6F (refer to the commands manual of the device).



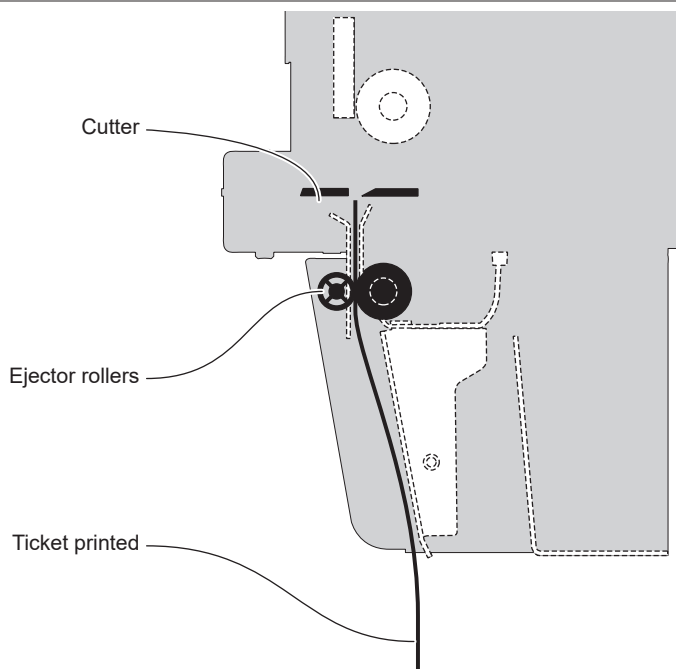
“EJECT” mode (KPM302III vSEL)

1



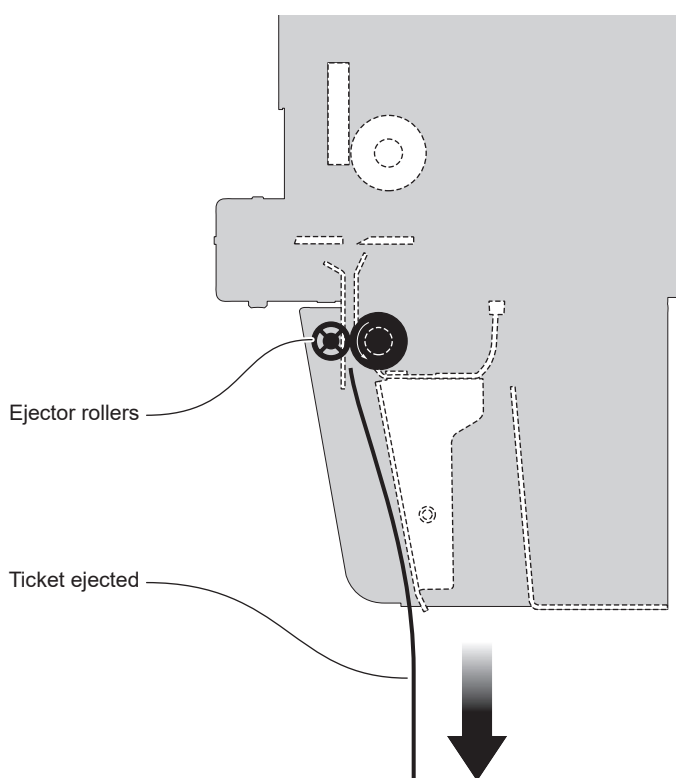
The device starts the ticket printing.

2



When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.

3



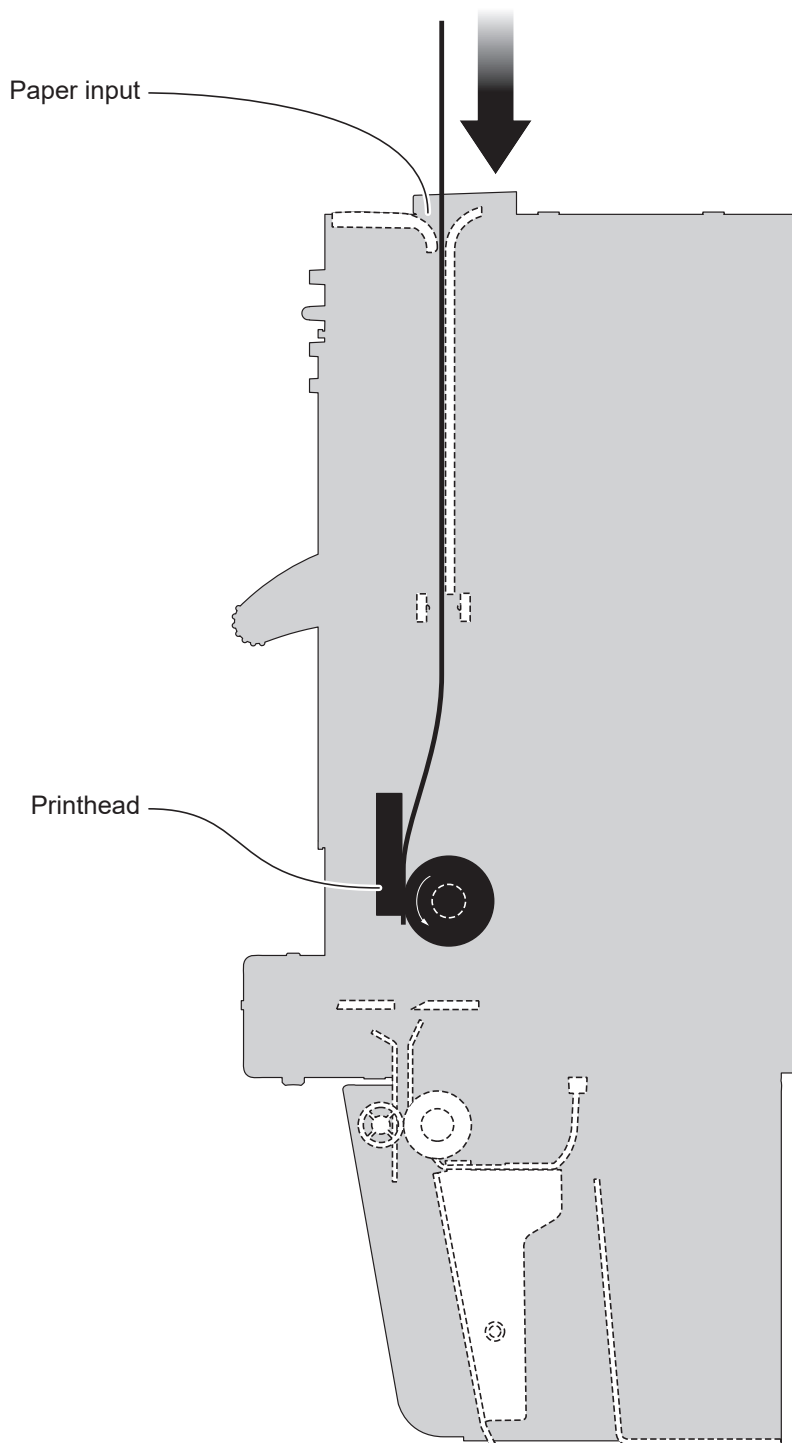
The device ejects the ticket printed.

NOTE:

To enable this issuing method, you need to correctly set the operation mode of the selector device with the commands 0x1D 0x70 0x6F and 0x1D 0x65 0x05 (refer to the commands manual of the device).

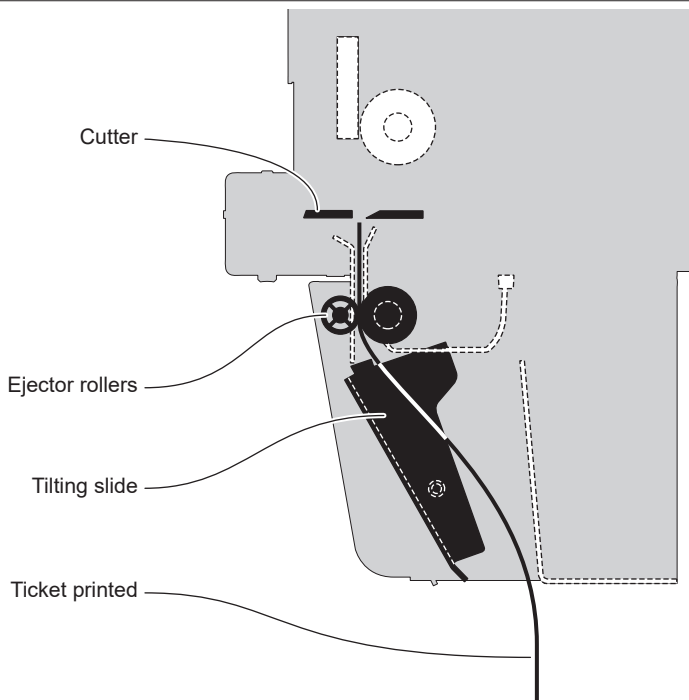
“COLLECT” mode (KPM302III vSEL)

1



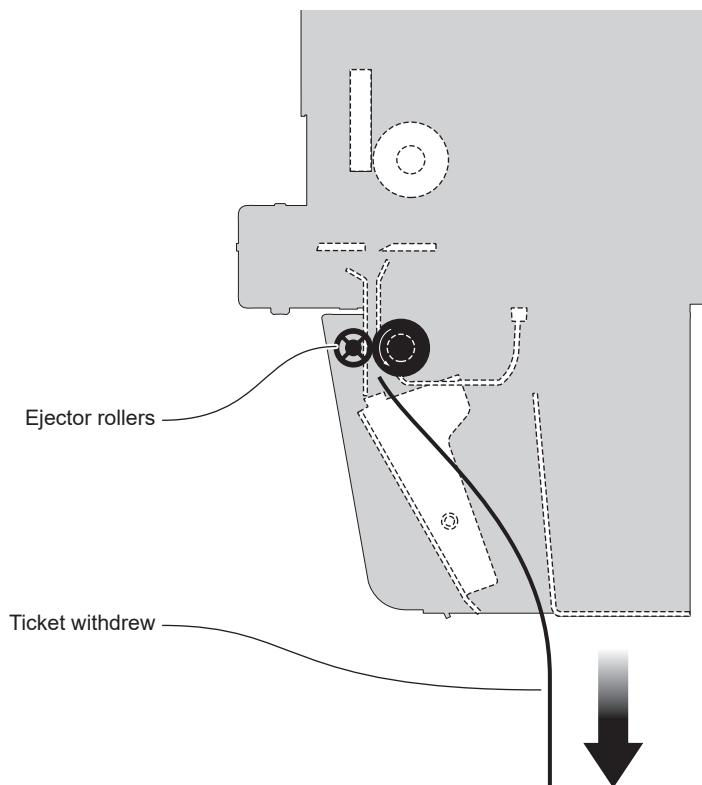
The device starts the ticket printing.

2



When printing ends, the device cuts the ticket printed and hold it between the ejector rollers. The tilting slide is lifted and the ticket printed is driven into the ejection canal.

3



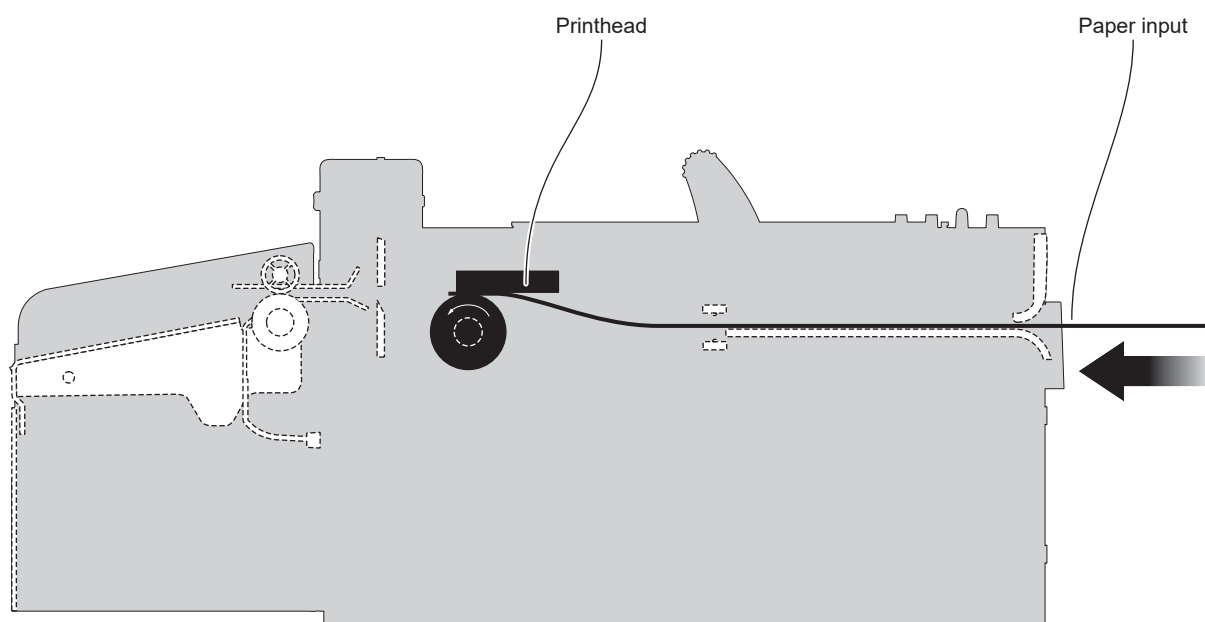
The device collects the ticket printed.

NOTE:

To enable this issuing method, you need to correctly set the operation mode of the selector device with the commands 0x1D 0x70 0x6F and 0x1D 0x65 0x05 (refer to the commands manual of the device).

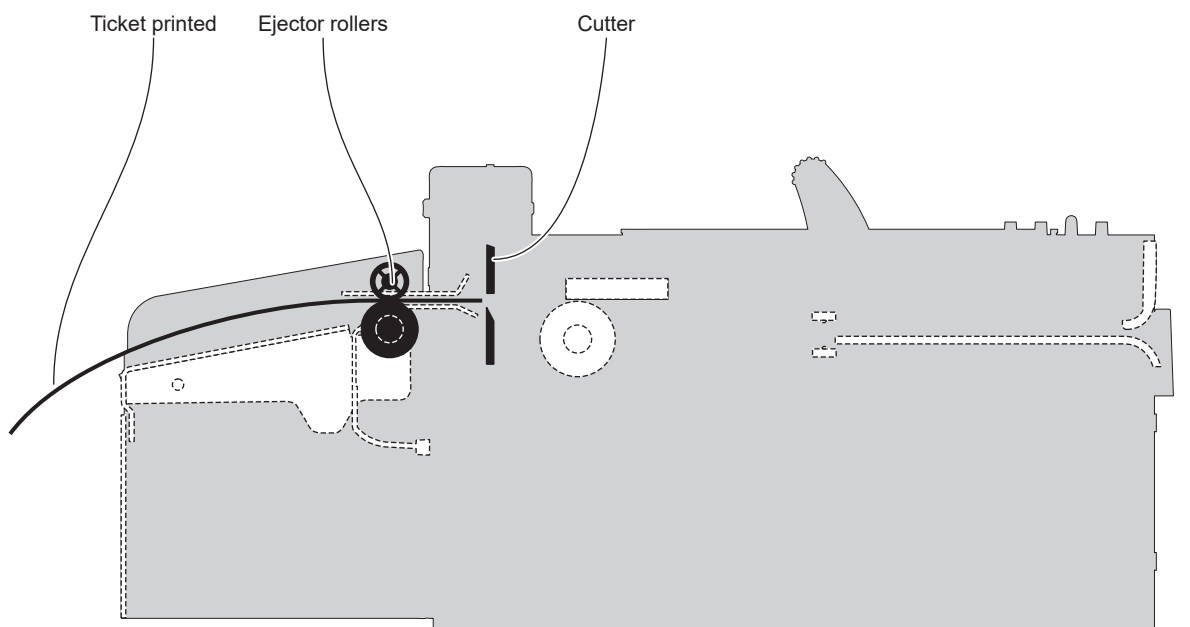
“PRESENT” mode (KPM302III hSEL, KPM302III TF-hSEL)

1



The device starts the ticket printing.

2

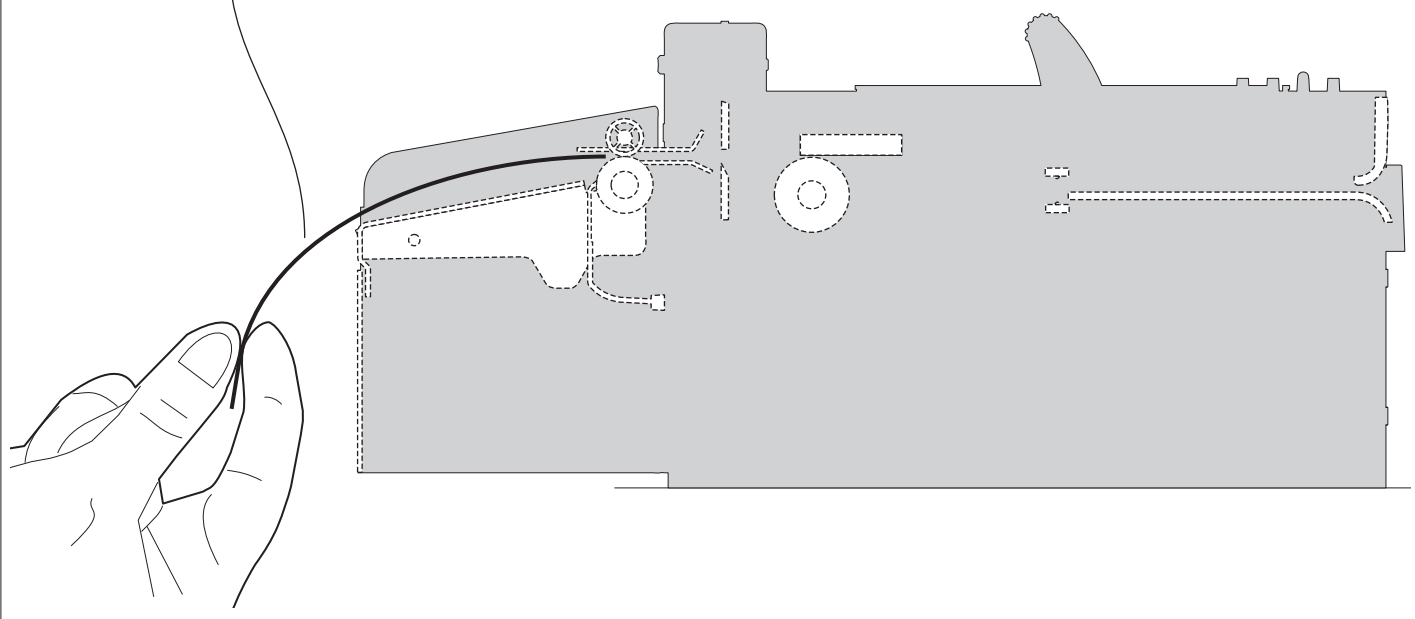


When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.



3

Ticket withdrew



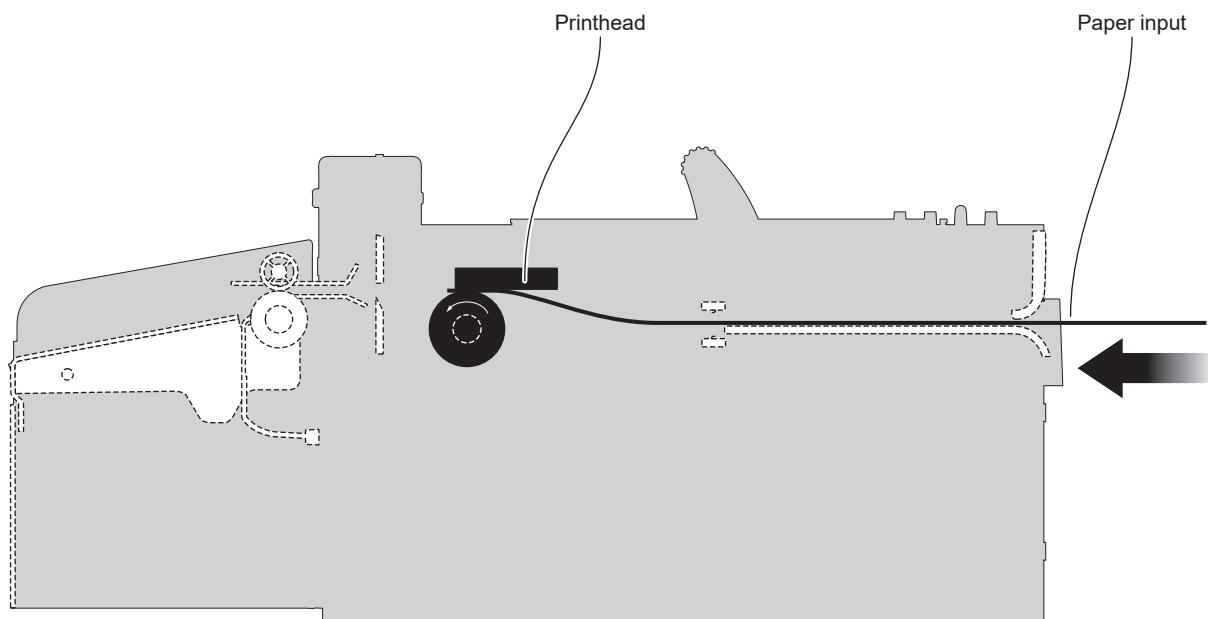
The user withdraws the ticket printed.

NOTE:

To enable this issuing method, you need to correctly set the operation mode of the selector device with the command 0x1D 0x70 0x6F (refer to the commands manual of the device).

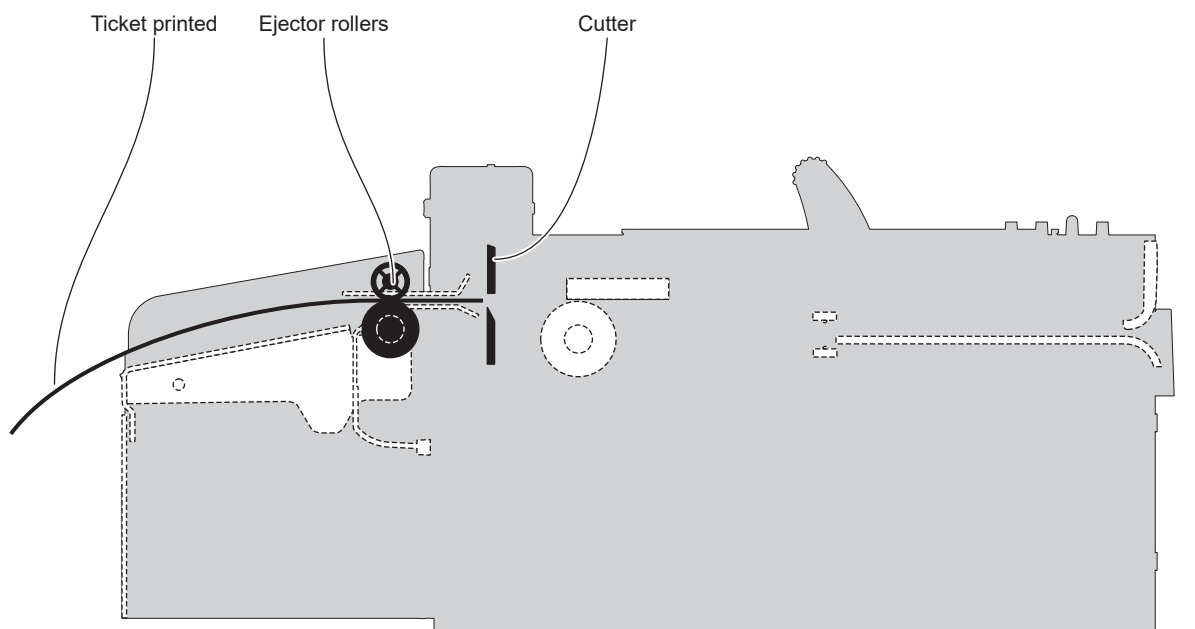
“EJECT” mode (KPM302III hSEL, KPM302III TF-hSEL)

1



The device starts the ticket printing.

2

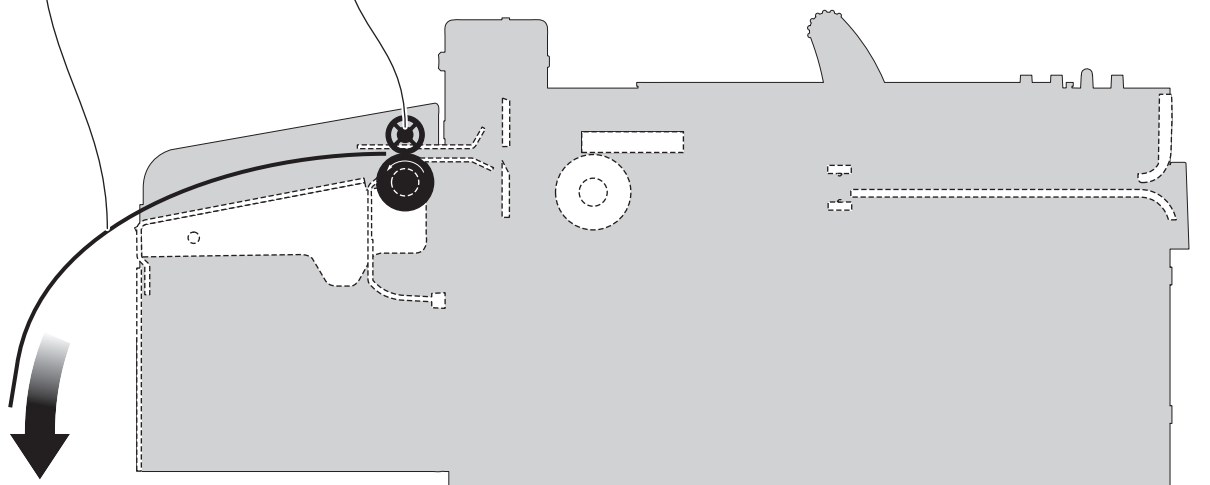


When printing ends, the device cuts the ticket printed and hold it between the ejector rollers.

3

Ticket ejected

Ejectors rollers



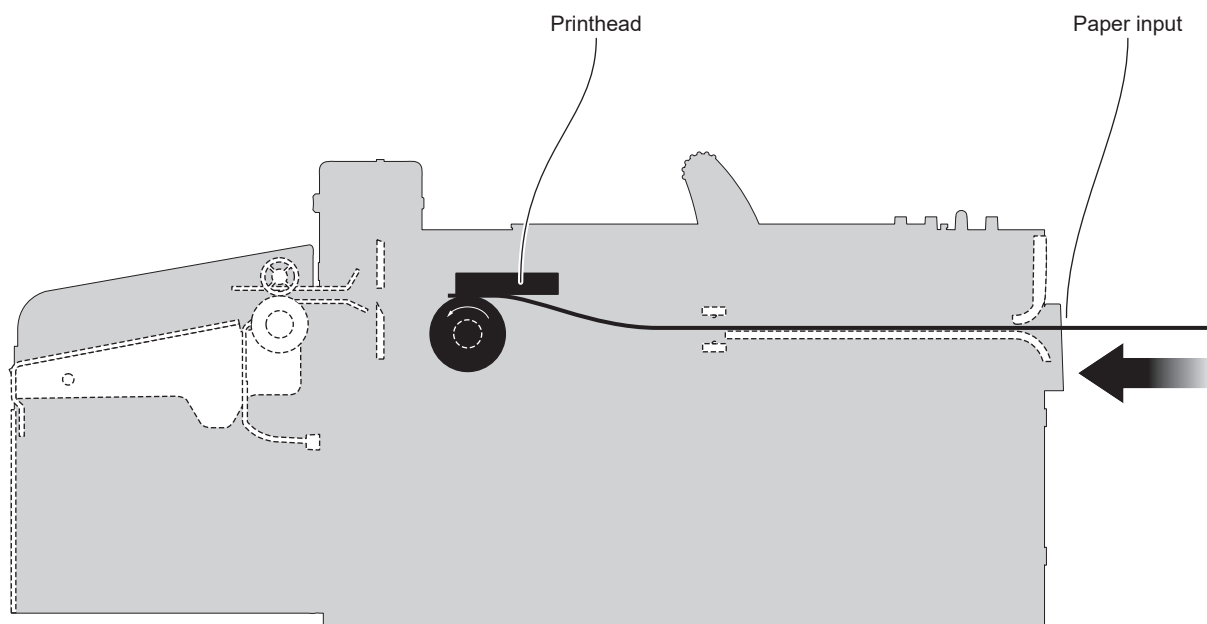
The device ejects the ticket printed.

NOTE:

To enable this issuing method, you need to correctly set the operation mode of the selector device with the commands `0x1D 0x70 0x6F` and `0x1D 0x65 0x05` (refer to the commands manual of the device).

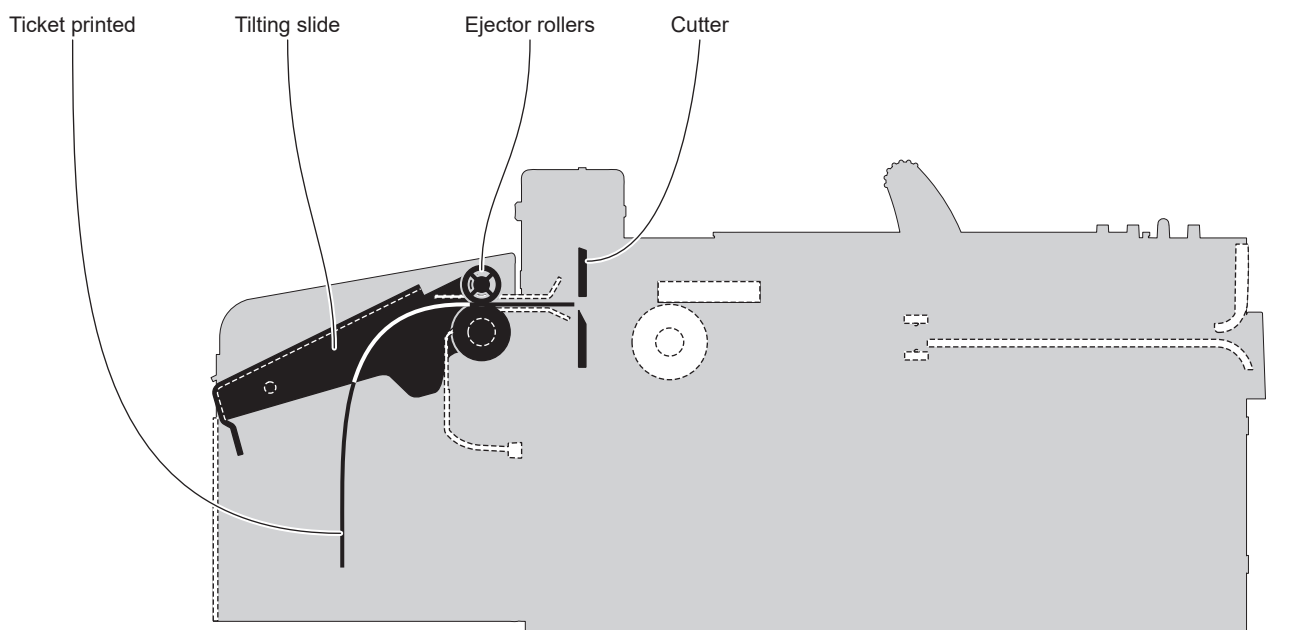
“COLLECT” mode (KPM302III hSEL, KPM302III TF-hSEL)

1



The device starts the ticket printing.

2

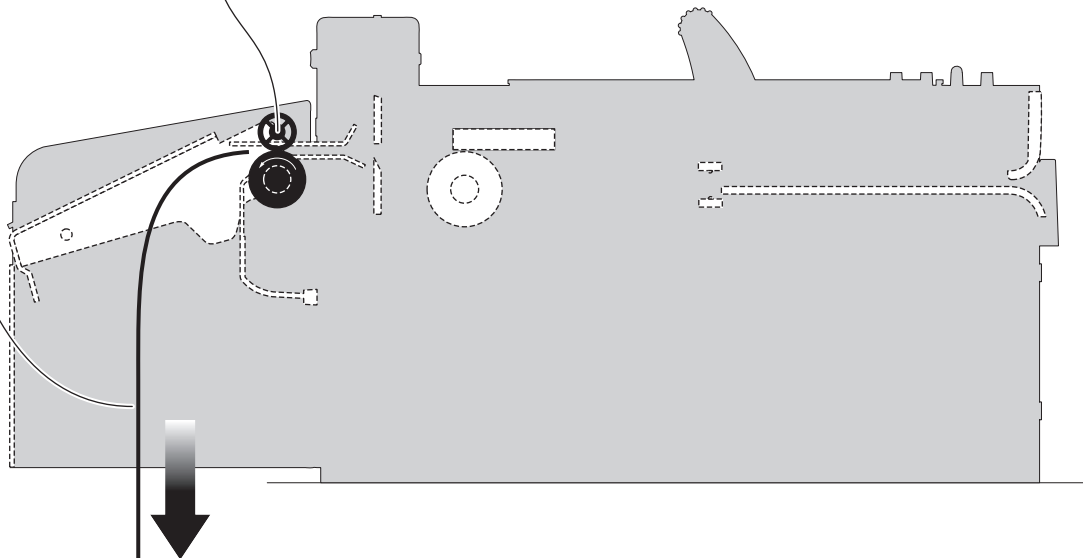


When printing ends, the device cuts the ticket printed and hold it between the ejector rollers. The tilting slide is lifted and the ticket printed is driven into the ejection canal.

3

Ticket withdrew

Ejector rollers



The device collects the ticket printed.

NOTE:

To enable this issuing method, you need to correctly set the operation mode of the selector device with the commands `0x1D 0x70 0x6F` and `0x1D 0x65 0x05` (refer to the commands manual of the device).

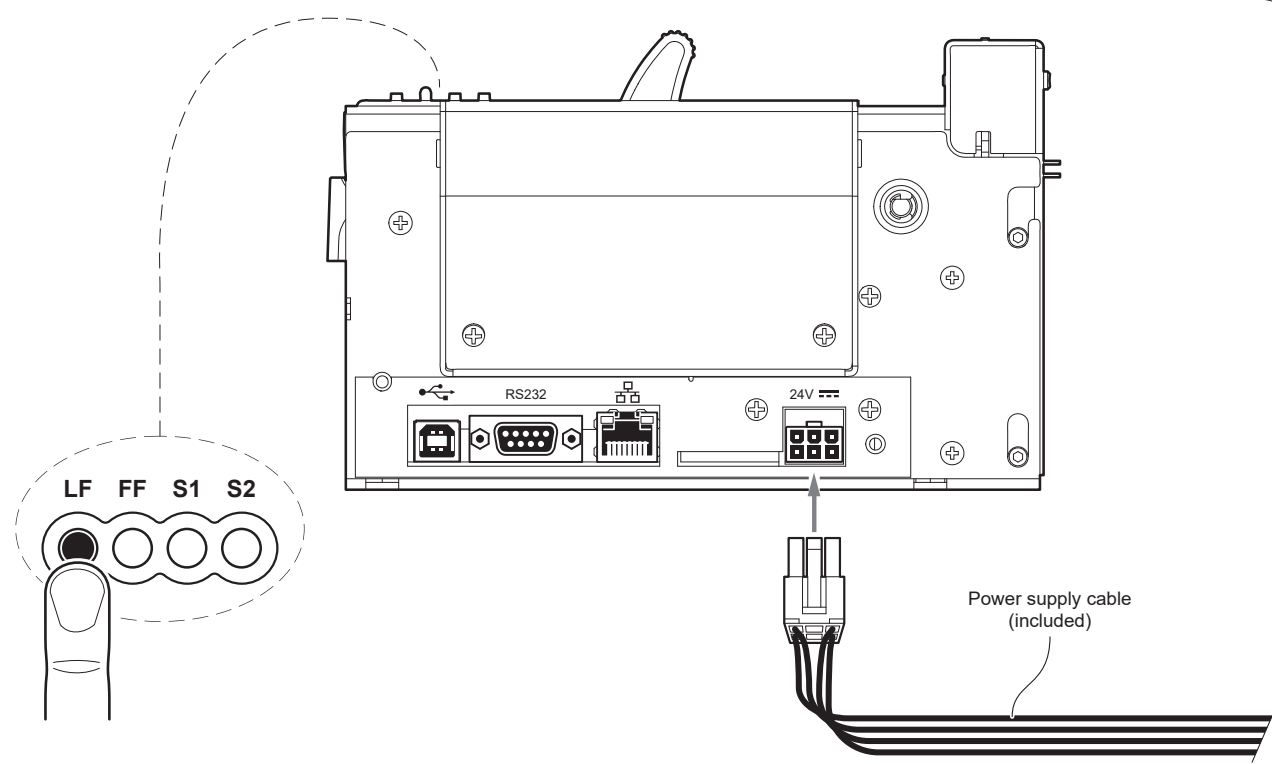
6 CONFIGURATION

6.1 Configuration by keys

To enter the configuration mode and print a setup report with the operating parameters of the device, proceed as follows.

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL

1



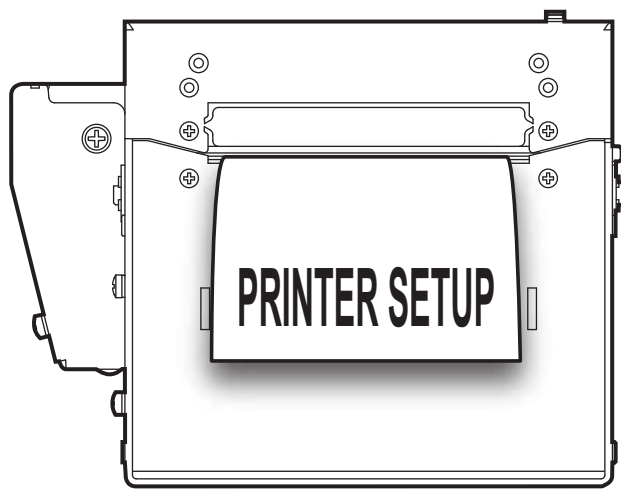
LF FF S1 S2

24V

Power supply cable (included)

While pressing the LF LINE FEED key, switch on the device by connecting the power supply cable.

2

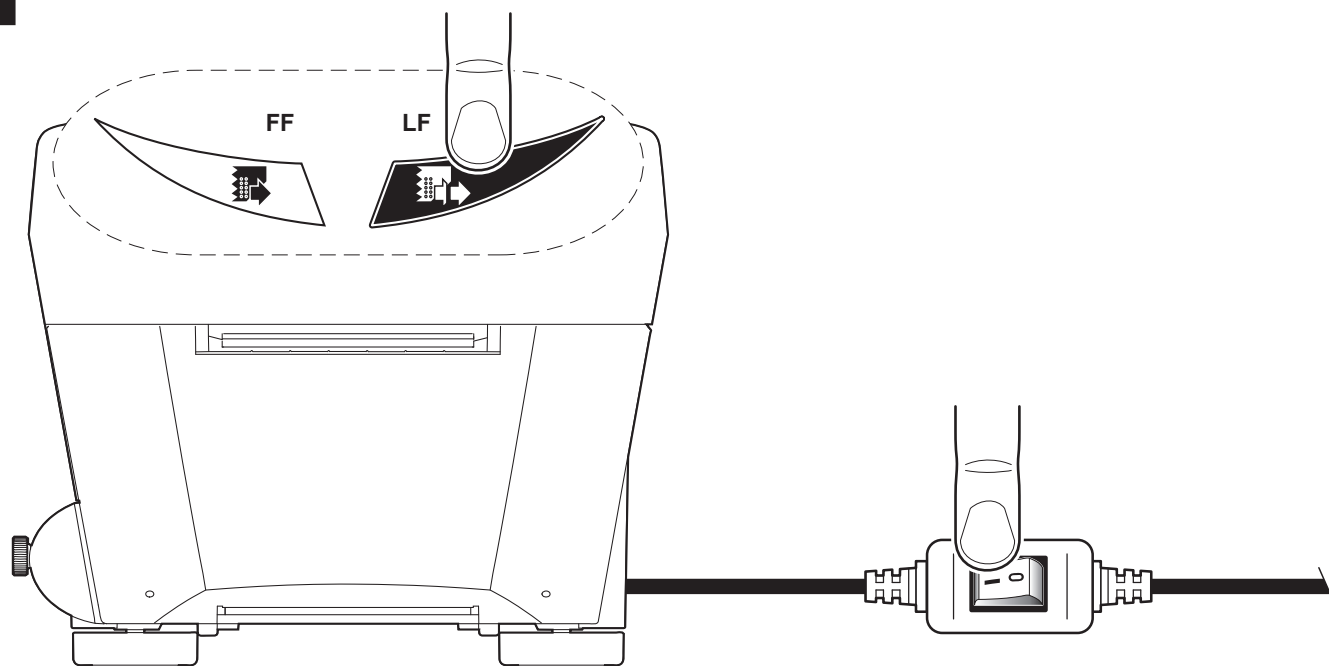


PRINTER SETUP

The device prints the report with the settings parameters. Follow the instruction printed on the paper or shown on display to proceed with configuration procedure.

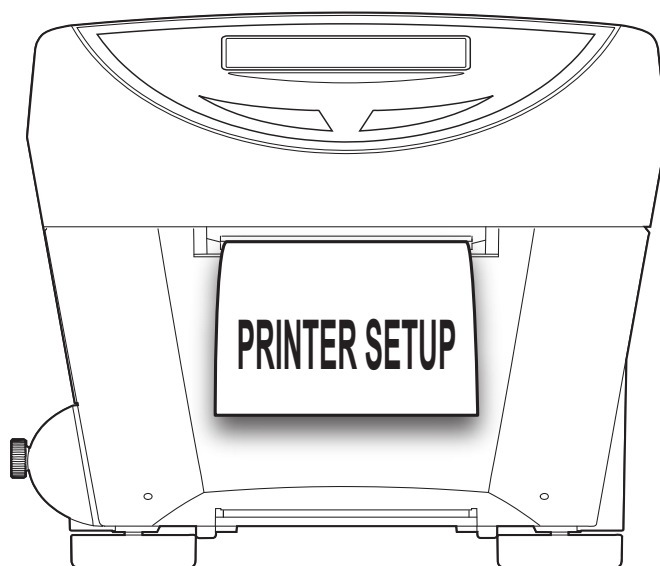


1



While pressing the LF LINE FEED key, switch on the device by pressing the ON/OFF key on the power supply cable.

2



The device prints the report with the settings parameters. Follow the instruction printed on the paper or shown on display to proceed with configuration procedure.



The following figures show the setup reports of the device. The shown values for parameters are sample values; for the list and the description of device parameters see the following paragraphs.

DEVICE NAME and
FIRMWARE MODULES
RELEASE

```

<device name>
SCODE: <code>      - rel 1.00
BCODE: <code>      - rel 1.00
FCODE: <code>      - rel 1.00
UCODE: <code>      - rel 1.00
DCODE: <code>      - rel 1.00
CPLD               - rel 1.00
  
```

DEVICE
STATUS

PRINTER SETTINGS

```

PRINTER TYPE .....<device model>
Barcode Reader .....Not Present
RFID module .....Not Present
PRINthead TYPE .....<head model>
INTERFACE .....RS232
ETHERNET TYPE .....10/100Base-TX
PROGRAM MEMORY TEST.....OK
DYNAMIC RAM TEST.....OK
EEPROM TEST.....OK
CUTTER TEST.....OK
PRINthead Rav.....561
HEAD VOLTAGE           [V] = 24.55
HEAD TEMPERATURE      [°C] = 26
POWER ON COUNTER      = 3
PAPER PRINTED         [cm] = 10
CUT COUNTER           = 35
  
```

PRINTER
PARAMETERS

```

Printer Emulation .....: CUSTOM/POS
RS232 Baud Rate .....: 115200 bps
RS232 Data Length.....: 8 bits/chr
RS232 Parity.....: None
RS232 Handshaking .....: Xon/Xoff
Busy Condition .....: RxFull
USB Class .....: Printer
USB Address Number .....: 0
Print Mode .....: Normal
Autofeed .....: CR disabled
Chars / inch .....: A=15 B=20cpi
Speed / Quality.....: Normal
Paper Width.....: 82 mm
Paper Threshold .....: 60%
Black mark Position.....: Bottom
Black mark Threshold.....: 40%
Black mark Distance [mm].....: +00.0
Black mark Min. Width.....: 0 mm
Cutter.....: Enabled
Selector .....: Disabled
External key.....: Disabled
Ticket Locking.....: Disabled
PaperEnd Buffer Clear .....: Disabled
Ticket Management.....: Disabled
Ejector Speed.....: 100%
Ejector Type.....: Ejector
Printhead Test PowerOn.....: Disabled
Font Type.....: International
Code Page [num] .....: 0
3F Paper End Management .....: Print All
3F Sensors Filter.....: 0
RFID Module Baud Rate .....: 115200 bps
Print Density.....: 0%
  
```

KEYS FUNCTIONS

```

[LF] enter Printer Setup
[FF] enter Ethernet Setup
[S1] enter Clock Setup
[S2] skip Setup
  
```



KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III, TK302III TF

KEYS FUNCTIONS



[LF] enter Printer Setup
[FF] enter Ethernet Setup
[S1] enter Clock Setup
[S2] skip Setup

ETHERNET
PARAMETERS



DHCP Client : **Disabled**
FTP Server : **Disabled**

IP Address : **192.168. 0. 1**
Subnet Mask : **255.255.240. 0**
Default Gateway..... : **192.168. 0. 5**
Primary DNS Server..... : **0. 0. 0. 0**
Secondary DNS Server..... : **0. 0. 0. 0**
TCP Printer Port : **9100**

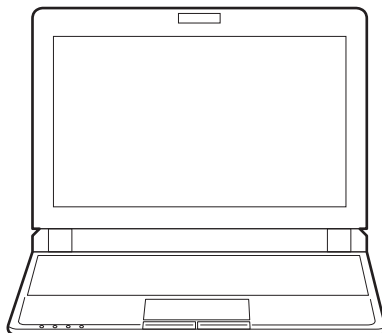
MAC Address : **00-0E-E2-02-0B-0D**

For advanced printer setup please connect to the site
<http://192.168.0.1>

6.2 Configuration by software

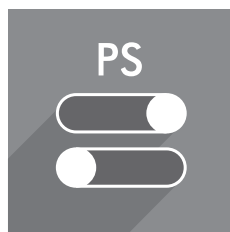
The configuration parameters can be set by the "PrinterSet" software tool available on www.custom4u.it. For a detailed description of operating parameters for the device, see the following paragraphs.
To set the device by software, proceed as follows.

1



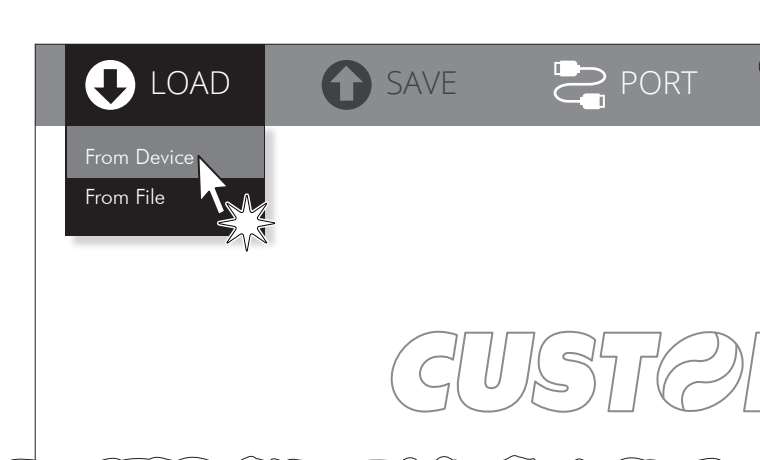
Connect the device to a PC directly (see [paragraph 4.5](#)),
without using HUB devices.

2



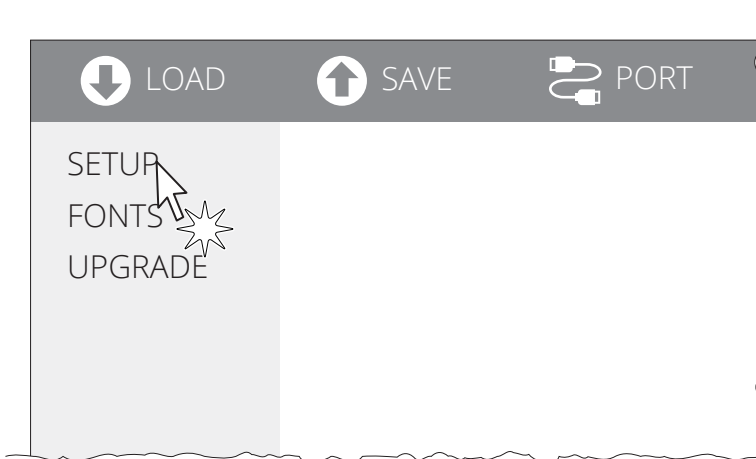
Start "PrinterSet" software tool.

3



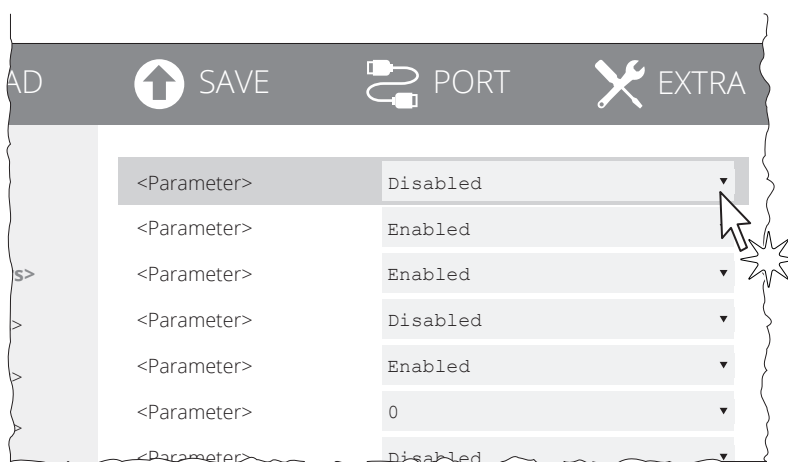
Click on LOAD > FROM DEVICE and select
the device connected to the PC.

4



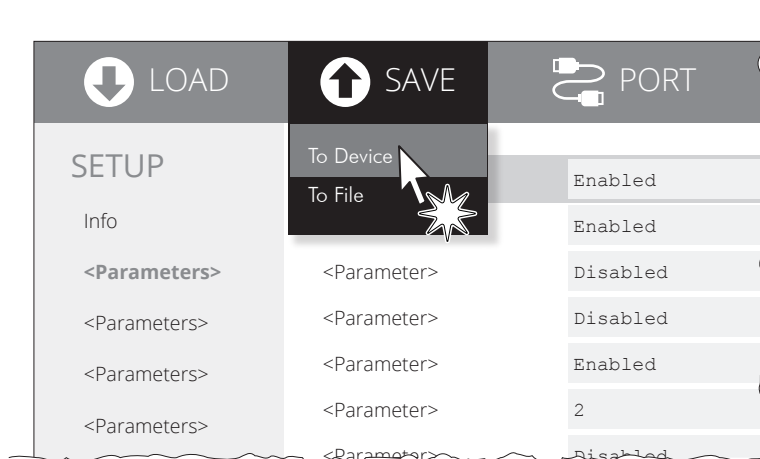
Click on SETUP to access the operating parameters of the device to be configured.

5



Make the desired changes to the device operating parameters.

6



Click on SAVE > TO DEVICE to make the changes made effective.

ATTENTION:

During saving, it is strongly advised against disconnecting the communication cable or to remove the power supply of PC or device.

6.3 Configuration by file

The configuration parameters can be set by editing the "Setup.ini" file stored on the Flash Drive of the device. Proceed as follows:

1

↓

Enter setup

Enter the configuration procedure by keys (see [paragraph 6.1](#)) or by software (see [paragraph 6.2](#)).


2

<parameter> : <value>
<parameter> : <value>
<parameter> : <value>
<parameter> : <value>
USB Class : Mass storage
<parameter> : <value>
<parameter> : <value>
<parameter> : <value>
<parameter> : <value>

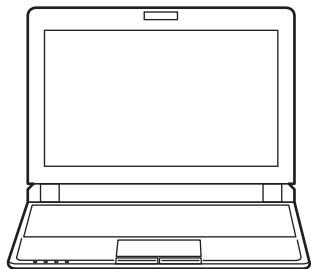
Check that the "USB Class" parameter is set to "Mass Storage".
Otherwise, this configuration mode is not available.

3

USB

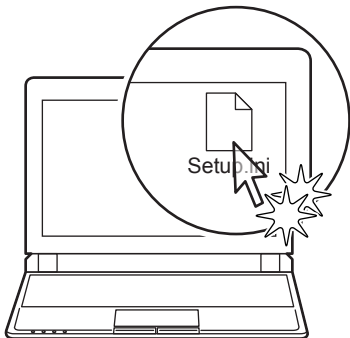


↓



Plug the device to a Personal Computer via USB.

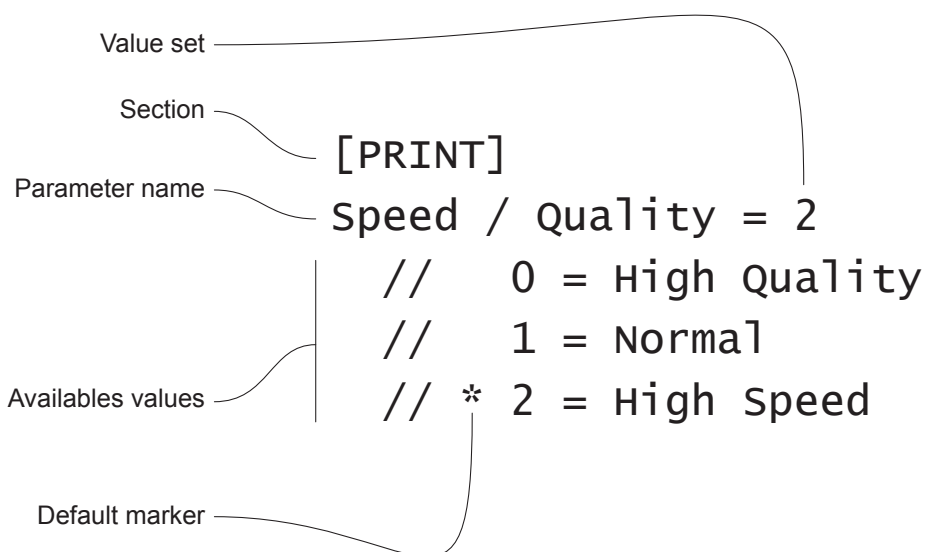
4



Enter the Flash drive of the device and edit the Setup.ini file.



The "Setup.ini" file is a configuration file that contains all the configurable parameters listed in text format and divided into some sections (indicated between square brackets). For each parameter, you find the parameter name followed by the value currently set and then the available values listed with a reference number. The reference number marked with the symbol ' * ' is the default one (see following figure).



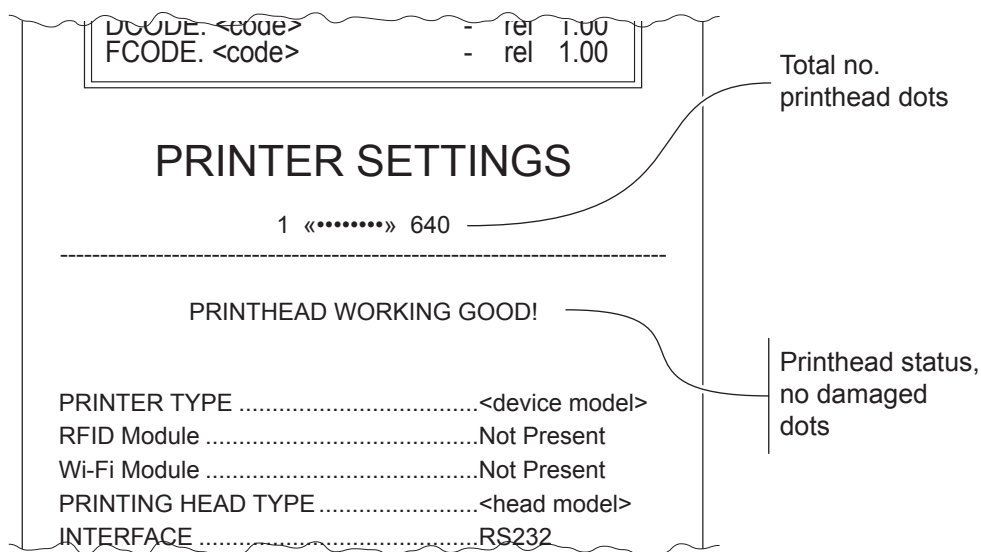
To modify the parameter, change the numeric value after the parameter name or use the default value by typing "D" (default). After editing device's parameter, simply save the "Setup.ini" file to make the modifies activated. For the list and the description of setup parameters, see the following paragraphs.

ATTENTION:

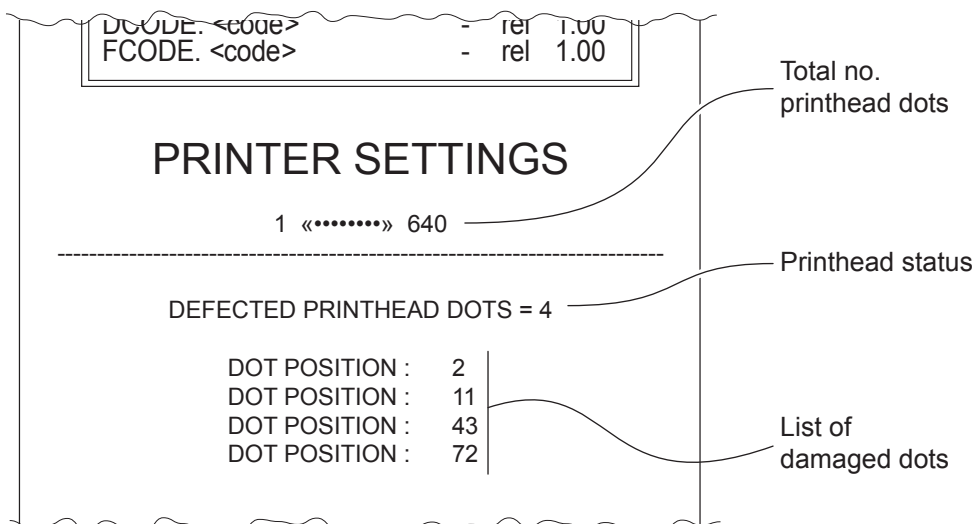
The change of value for the "USB Mass Storage" parameter may compromise the access to the Setup.ini file. Be careful to keep the "Enabled" value to allow a new access to the Flash Drive.

6.4 Printhead status

The device performs the printhead operating status when printing the setup report. The total number of dots is reported. Are indicated the total dots number of the printhead and their status (see figure below).



In case of damaged dots, these are listed in the print out in according to their position on the heating line (see figure below).





6.5 Device status

The device operating status is indicated in the configuration print-out in which, next to the name of the components displayed, the following information is given:

PRINTER TYPE	device model
BARCODE READER	presence of the barcode reader
RFID MODULE	presence of the RFID reader/writer
PRINTHEAD TYPE	print head model
INTERFACE	interface present
ETHERNET TYPE	Ethernet connection type
PROGRAM MEMORY TEST	OK appears if functioning and NOT OK if faulty
DYNAMIC RAM TEST	OK appears if functioning and NOT OK if faulty
EEPROM TEST	OK appears if functioning and NOT OK if faulty
CUTTER TEST ⁽¹⁾	OK appears if functioning and NOT OK if faulty
PRINTHEAD Rav	resistance of a dot head
HEAD VOLTAGE	voltage of the head
HEAD TEMPERATURE	temperature of the head
POWER ON COUNTER	number of power-ups made
PAPER PRINTED	centimetres of paper printed
CUT COUNTER ⁽¹⁾	number of cuts made

NOTE:

(1) Only for models with autocutter.



6.6 Communication parameters

The parameters marked with the symbol [Ⓓ] are the default values.

Settings remain active even after the device has been turned off and they are stored in non-volatile memory.

RS232 BAUD RATE	Communication speed of the serial interface. 115200 [Ⓓ] 9600 57600 4800 38400 2400 19200 1200 This parameter is valid only with serial interface.
RS232 DATA LENGTH	Number of bit used for characters encoding. 7 bits/car 8 bits/car [Ⓓ] This parameter is valid only with serial interface.
RS232 PARITY	Bit for the parity control of the serial interface. None [Ⓓ] = parity bit omitted Even = even value for parity bit Odd = odd value for parity bit This parameter is valid only with serial interface.
RS232 HANDSHAKING	Handshaking. XON/XOFF [Ⓓ] = software handshaking Hardware = hardware handshaking (CTS/RTS) This parameter is valid only with serial interface.
BUSY CONDITION	Activation mode for busy signal: Offline/RXFull = busy signal is activated when the device is both in Offline status and the buffer is full RXFull [Ⓓ] = busy signal is activated when the buffer is full This parameter is valid only with serial interface.
USB CLASS	USB communication class definition. Printer [Ⓓ] = setting the printer function Virtual COM = setting the USB port as a virtual serial port Mass Storage = setting the sharing mode from Mass Storage To use the value "Virtual COM", it is necessary to install an additional driver (see paragraph 4.7)



USB ADDRESS NUMBER Numerical address code for the univocal identification of the USB device (in case of more than a USB device connected with the same PC).

0 ^D	3	6	9
1	4	7	None
2	5	8	

If the parameter is set on "None", the device is identified by the physical USB port to which it is connected.

RFID MODULE BAUD RATE Communication speed of the RFID module.

115200 ^D	9600
57600	4800
38400	2400
19200	1200

If the RFID module is not recognized in the printer status ("RFID module = Not Present"), set this parameter on the correct value.

DHCP CLIENT Setting of the DHCP protocol:

Disabled^D = protocol disabled
Enabled = protocol enabled

This parameter is present only for models with Ethernet interface.

This parameter can be modified by software (see [paragraph 6.2](#)) and by file (see [paragraph 6.3](#)).

FTP SERVER Setting of the FTP server:

Disabled^D = FTP server disabled
Enabled = FTP server enabled

This parameter is present only for models with Ethernet interface.

This parameter can be modified by software (see [paragraph 6.2](#)) and by file (see [paragraph 6.3](#)).

IP ADDRESS This is the IP address of device, assigned by the network administrator.

This parameter is present only for models with Ethernet interface.

This parameter can be modified by software (see [paragraph 6.2](#)) and by file (see [paragraph 6.3](#)).

SUBNET MASK This parameter identifies the local network address.

This parameter is present only for models with Ethernet interface.

It can be modified by software (see [paragraph 6.2](#)) and by file (see [paragraph 6.3](#)).



DEFAULT GATEWAY	<p>This parameter identifies the Gateway IP address used to send applications to the external network.</p> <p>This parameter is present only for models with Ethernet interface.</p> <p>It can be modified by software (see paragraph 6.2) and by file (see paragraph 6.3).</p>
PRIMARY DNS SERVER	<p>This parameter identifies the primary DNS server (Domain Name System).</p> <p>This parameter is present only for models with Ethernet interface.</p> <p>It can be modified by software (see paragraph 6.2) and by file (see paragraph 6.3).</p>
SECONDARY DNS SERVER	<p>This parameter identifies the secondary DNS server (Domain Name System).</p> <p>This parameter is present only for models with Ethernet interface.</p> <p>It can be modified by software (see paragraph 6.2) and by file (see paragraph 6.3).</p>
TCP PRINTER PORT	<p>This parameter sets the TCP port number.</p> <p>This parameter is present only for models with Ethernet interface.</p> <p>It can be modified by software (see paragraph 6.2) and by file (see paragraph 6.3).</p>
MAC ADDRESS	<p>This is the number, provided by the constructor, that identifies the device; this number is univocal.</p> <p>This parameter is present only for models with Ethernet interface.</p> <p>It can be modified by software (see paragraph 6.2) and by file (see paragraph 6.3).</p>

ATTENTION:

Any changes to network parameters will interrupt browser connection. If the server not responding you must reconnect to the new IP address set.



6.7 Operation parameters

The parameters marked with the symbol [Ⓓ] are the default values.

Settings remain active even after the device has been turned off and they are stored in non-volatile memory.

PRINTER EMULATION

Available emulations for the device.

SVELTA [Ⓓ]
CUSTOM POS

PRINT MODE

Printing mode.

Normal [Ⓓ] = enables printing in normal writing way
Reverse = enables printing rotated 180 degrees

AUTOFEED

Setting of the Carriage Return character:

CR disabled [Ⓓ] = Carriage Return disabled
CR enabled = Carriage Return enabled

The parameter is printed on setup report only if the parameter "Printer emulation" is set on "CUSTOM POS".

CHARS / INCH

Font selection (CPI = Characters Per Inch):

A = 11 cpi, B = 15 cpi
A = 15 cpi, B = 20 cpi [Ⓓ]
A = 20 cpi, B = 25 cpi

The parameter is printed on setup report only if the parameter "Printer emulation" is set on "CUSTOM POS".

SPEED / QUALITY

Setting of printing speed and printing quality:

High Quality
Normal
High Speed [Ⓓ]

PAPER WIDTH

Width of printing area:

82 mm [Ⓓ]	80 mm	78 mm	76 mm
74 mm	72 mm	70 mm	68 mm
66 mm	64 mm	62 mm	60 mm
58 mm	56 mm	54 mm	52 mm
50 mm	48 mm	46 mm	44 mm
42 mm	40 mm	38 mm	36 mm
34 mm	32 mm	30 mm	28 mm
26 mm	24 mm	22 mm	20 mm



PAPER THRESHOLD Threshold value (in percent) for the recognition of the presence of paper by the paper presence sensor.

30% 70%
40%^D 80%
50% 90%
60%

CUTTER Enable or disable the autocutter at the hardware level:

Disabled = autocutter disabled
Enabled^D = autocutter enabled

For the device described in this document, keep this parameter set on "Enabled", as the default value.

SELECTOR Enable or disable the selector device at the hardware level:

Disabled^D = selector disabled
Enabled = selector enabled

For the models with selector device, set this parameter on "Enabled".

EXTERNAL KEYS Enable or disable the external keys of TK302III and TK302III TF:

Disabled = external keys disabled
Enabled^D = external keys enabled

PAPEREND BUFFER CLEAR Cleaning mode of data in receive buffer, if the printing is stopped due to lack of paper:

Disabled^D = Data remain in the receive buffer. When the paper runs out, the device keeps the remaining data in receive buffer and prints the remaining portion of ticket after that the new paper is loaded.

Enabled = When the paper runs out, all data in the receive buffer are deleted.

PRINT DENSITY Adjusting the printing density:

-25% 0^D +25%
-12% +12%

The print quality is strongly influenced by the type of chemical treatment and the type of storage to which the thermal paper has been subjected, as well as by the weight of the same. It may therefore necessary to act on this parameter to obtain the desired print quality.



TICKET LOCKING

This parameter enables/disables the block of the paper inside the device where the ticket is not cut with the autocutter, but is presented for the manual tear off by the user:

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL, TK302III

Disabled ^D = paper block disabled
Enabled = paper block enabled

KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III TF

Disabled ^D = paper block disabled
By Printer = the motor remail switched on also at the printing end
By Feeder = stops the paper of the not active (idle) feeders in order to avoid that the paper parked in an idle feeder, is dragger inside the printer
Complete = ticket locking by printer and feeder (combination of the two previous effects)

If parameter "Black mark position" is set on "Disabled", this parameter has no effect on device configuration and it is not printed on setup report.

TICKET MANAGEMENT

This parameter allows the ticket management:

Disabled ^D = no check
Short Ticket = it is possible to manage tickets with length less than the distance between black mark sensor and printing line
Check First = before printing, the device checks the integrity of the first ticket
Stub+Ticket = it is possible to manage tickets with stub

EJECTOR SPEED

Set the speed of the ejector device:

25% 75%
50% 100% ^D

This parameter is valid only for models with the ejector device.

EJECTOR TYPE

Management of the ejector device:

Presenter = after the printing end, the device cuts the ticket and holds it between the ejector rollers waiting for the user withdrawal
Ejector ^D = after the printing end, the device cut the ticket and eject it

This parameter is valid only for models with the ejector device.

PRINTHEAD TEST POWERON

Setting of the performing of the print head test:

Disabled ^D = the test is performed only during the printing of the setup report
Enabled = the test is performed at each power on

FONT TYPE

Setting of the font type:

International ^D = enables the use of the 256 characters font tables
Chinese GB18030 = enables the use of the chinese extended font GB18030
Korean CP949 = enables the use of the korean font CP949



CODE PAGE

Identifier number of the character code page to use.

See [paragraph 9.12](#) to learn about the character tables corresponding to the identification numbers set with this parameter.

The character tables set with this parameter are the same set with the command 0x1B 0x74 (refer to the commands manual of the device).

The numeric value of the identifier is made up with the following two parameters for the setting of two digits for the tens and the units:

CODE PAGE [num x 10]	Setting the digit for tens:		
		0 ^D	2
	1	3	5

CODE PAGE [num x 1]	Setting the digit for units:				
		0 ^D	2	4	6
	1	3	5	7	9

3F PAPER END MANAGEMENT

KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III TF

Management of the paper end sensors of triple feeder:

Print All^D = when the paper end sensor of a feed line of the triple feeder detects the paper end, it is not possible to change the feed line until all tickets remaining in that feed line are printed (so that the paper sensors of the printer will have detected the end of paper)

Eject = when the paper end sensor of a feed line of the triple feeder detects the paper end, the device automatically ejects the paper remaining on that feed line and prints diagonal voiding lines on the remaining tickets

Retract = when the paper end sensor of a feed line of the triple feeder detects the paper end, the device performs a paper retracting up to the parking position

3F SENSORS FILTER

KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III TF

Set the length of black area detected by the triple feeder sensors to be considered as paper end. This is to not to confuse black mark and other graphics printed on the ticket as paper end.

0 mm ^D	3 mm	6 mm	9 mm
1 mm	4 mm	7 mm	10 mm
2 mm	5 mm	8 mm	



6.8 Alignment parameters

The parameters marked with the symbol ^D are the default values.

Settings remain active even after the device has been turned off and they are stored in non-volatile me.

BLACK MARK POSITION	Position of the alignment black mark and choice of appropriate black mark sensor (see chapter 7):
Disabled	= the black mark alignment is not performed
Top	= the black mark position is detected by the top sensor (reflection)
Bottom	= the black mark position is detected by the bottom sensor (reflection)
Transparent ^D	= the black mark is detected by the bottom sensor and the top sensor placed in front of (transparence)

BLACK MARK THRESHOLD	Threshold value (in percent) for the recognition of the presence of black mark by the black mark sensor:
30%	70%
40%	80%
50%	90%
60% ^D	
	If parameter "Black mark position" is set on "Disabled", this parameter has no effect on device configuration and it is not printed on setup report.

BLACK MARK DISTANCE	"Black mark distance" is the minimum distance (in millimetres) between the upper edge of ticket and the black mark (see chapter 7).
	The numeric value of the distance is made up with the following four parameters for the setting of three digits (two for the integer part of the number, one for the decimal part and of the sign):

	Sign setting:
BLACK MARK DISTANCE SIGN	+ ^D = positive distance
	- = negative distance

	Setting the digit for tens:
BLACK MARK DISTANCE [mm x 10]	0 ^D 2 4 6 8
	1 3 5 7 9

	Setting the digit for units:
BLACK MARK DISTANCE [mm x 1]	0 ^D 2 4 6 8
	1 3 5 7 9

	Setting the digit for decimals:
BLACK MARK DISTANCE [mm x .1]	0 ^D 2 4 6 8
	1 3 5 7 9



For example, to set a positive black mark distance value of 15 mm, modify the parameters as follows:

Black mark distance sign	= +
Black mark distance [mm x 10]	= 1
Black mark distance [mm x 1]	= 5
Black mark distance [mm x .1]	= 0

If the "Black mark position" parameter is set on "Disabled" value, this parameter has no effect on device configuration and it is not printed on setup report.

**BLACK MARK
MIN. WIDTH**

This parameter set the minimum length of the black mark in order to avoid that other graphics present on the ticket can be detected as a black mark.

0 mm ^D	6 mm	12 mm	18 mm
1 mm	7 mm	13 mm	19 mm
2 mm	8 mm	14 mm	20 mm
3 mm	9 mm	15 mm	
4 mm	10 mm	16 mm	
5 mm	11 mm	17 mm	

If the "Black mark position" parameter is set on "Disabled" value, this parameter has no effect on device configuration and it is not printed on setup report.



6.9 Hexadecimal dump

This function is used for the diagnosis of the characters received from the communications port. Characters are printed as hexadecimal code and the corresponding ASCII code (see below). Each line is preceded by a counter in hexadecimal that indicates the number of bytes received.

During the startup, if you hold down the LF LINE FEED key, the device enters the self-test routine and print the setup report. The device remains in standby until a key is pressed or characters are received through the communication port (Hexadecimal Dump mode). For each character sent, the ticket shows the hexadecimal value and the ASCII codes (if the characters are underlined, the receive buffer is full). Shown below is an example of a Hexadecimal Dump:

```

                                HEXADECEIMAL DUMP

31 32 33 34 35 ...    12345 ...
39 30 31 32 33 ...    90123 ...
37 38 39 75 69 ...    789ui ...
68 6B 6A 73 64 ...    hkjsd ...
73 64 66 6B 6A ...    sdfkj ...
66 73 64 66 6B ...    fsdfk ...
65 69 6F 79 75 ...    eioyu ...
6F 72 69 75 77 ...    oriuw ...
6F 75 77 65 72 ...    ouwer ...
77 65 72 69 6F ...    werio ...
72 69 6F 75 77 ...    riouw ...
6B 6C 73 64 66 ...    klsdf ...
64 66 6B 73 64 ...    dfksd ...
73 64 66 6B 6A ...    sdfkj ...
66 6B F2 6A 73 ...    fk≥j ...
6A 6B 6C 68          jklh
```



6.10 Calendar clock

The device is equipped with a Real Time Clock. During power-up, held down the LF LINE FEED key to enter in the device configuration mode. Press the S1 key to enter in the clock configuration (see following figure).

Press the LF LINE FEED key to modify date/time; the device will print the updated date and time.

Follow the instructions printed on the paper for the key functionality. The highlighted digit (the number is written in negative mode) indicates the digit to be modified. Press the LF LINE FEED key to modify the value of the highlighted digit; every single LF LINE FEED key pressure increases of 1 his value. Once the value 9 is reached the counting starts again from 0.

Press the FF FORM FEED key to move the cursor on the next digit; if the cursor position is on the latest digit you can proceed to next parameter by pressing the FF FORM FEED again.

Press the S2 key to exit and terminate the setting procedure.

CLOCK SETUP

[LF] to modify date/time
[FF] to next field
[S2] to exit

01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00
01/01/21	12:00:00

Date Time Setting :
01/01/21 12:00:00

NOTE:

For models without Real Time Clock, data and time setting remains until the device shutdown.



TK202III, TK302III, TK302III TF

The device is equipped with a Real Time Clock. Proceed as follows to perform the clock configuration.

1

LF = ENTER SETUP...
FF = EXIT SETUP...

During power-up, press the LF LINE FEED key to enter the setup configuration.

2

Set-Up type...
Printer Set/Up

Press the LF LINE FEED key to select the Real Time Clock settings.

3

Set-Up type...
Real Time Clock

Press the FF FORM FEED key to confirm the selection.
The date/time values will be displayed.
Follow the instructions printed on the paper.

4

0→1→2→3→4→5→6→7→8→9

Clock Setup
01/01/21 12:00:00

The digit to be modified is highlighted.
Press the LF LINE FEED key to modify the value;
every press on the button increases the value by one.
Once the max selectable value is reached the
counting starts again from 0.

5

0→1→2→3→4→5→6→7→8→9

Clock Setup
01/01/21 12:00:00

Use the FF FORM FEED key to move the cursor
on the next digit; if the cursor position is
on the latest digit, press the FF FORM FEED key
to exit and save the date/time entered.
Then the device is ready.







7 ALIGNMENT

The device is provided with sensors for the use of alignment black mark in order to handle:

- roll of tickets with pre-printed fields and a fixed length;
- fan-fold module of tickets with pre-printed fields and a fixed length.

The alignment black mark may be formed by

- a black mark printed on the paper;
- a hole between two tickets;
- a gap between two labels (only for models without triple feeder).

All alignment sensors are “reflection” sensors: this kind of sensor emits a band of light and detects the quantity of light reflected to it. The presence of the black mark is therefore detected by the amount of light that returns to the sensor, considering that the light is reflected by the white paper and absorbed by the black mark.

To use tickets with holes or labels with gap, it is possible to use the same sensors as “transparence” sensors, coupled two by two: a beam of light is emitted by the transmitter sensor and the quantity of light which reaches the opposite receiver sensor is detected. The presence of a hole or a gap is detected evaluating the amount of light that arrives to the opposite sensor, considering that the paper doesn't allow the beam of light to reach the receiver, whereas a gap or a hole lets the light to reach the receiver.

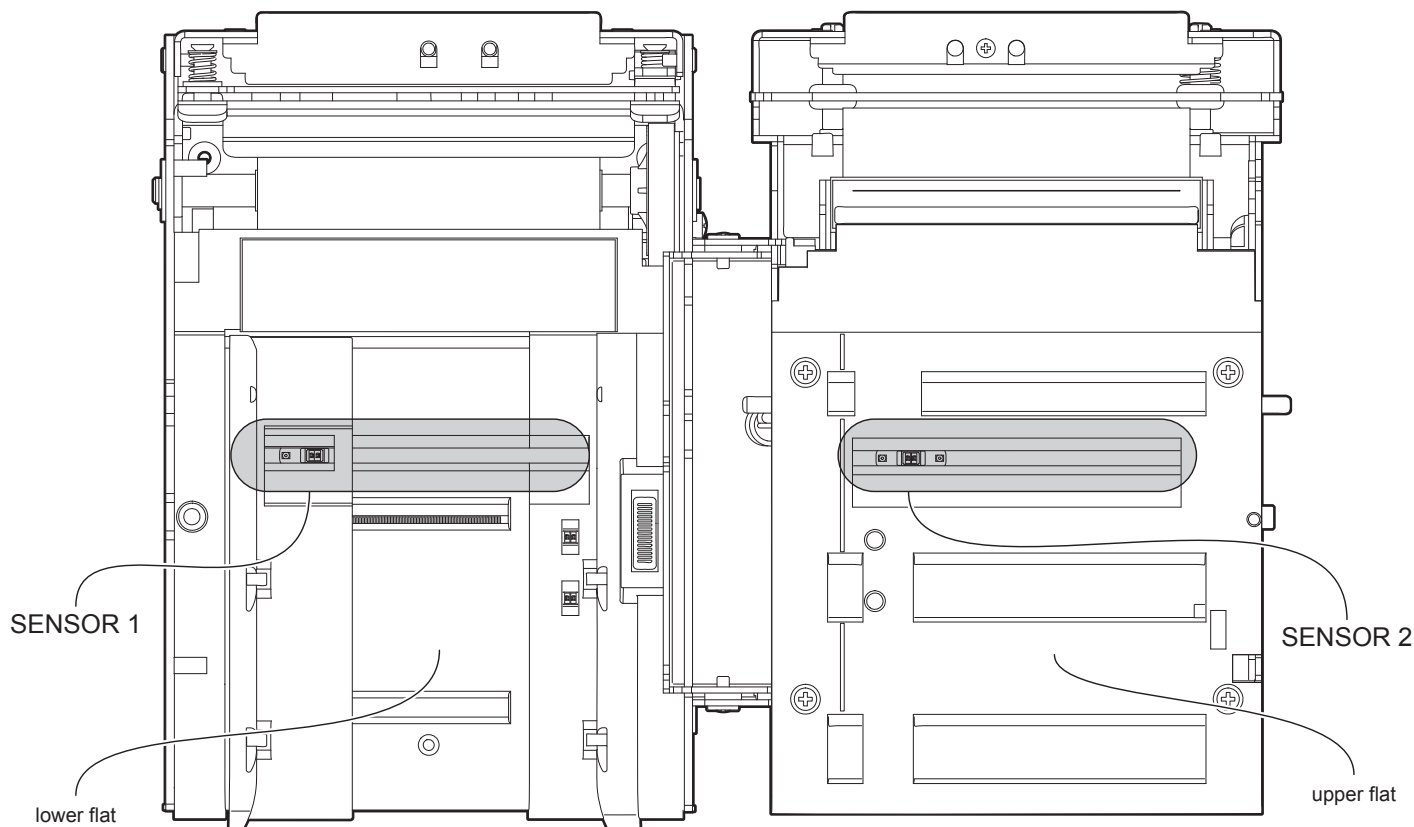
The following paragraphs show how to correctly set the configuration parameters of device in order to assure the alignment.

7.1 Enable alignment

The device is provided with the two following sensors for alignment shown in figure:

- SENSOR 1, a mobile sensor placed on the lower flat,
- SENSOR 2, a mobile sensor placed on the upper flat.

For ease of understanding, all the following images represent the two flats on the same plane. Moreover, for some models is represented only the internal printer group without external plastic chassis or triple feeder.



To guarantee the alignment, it is necessary to correctly choose the sensor to use for the black mark detection depending on the type of black mark and its location on the ticket.

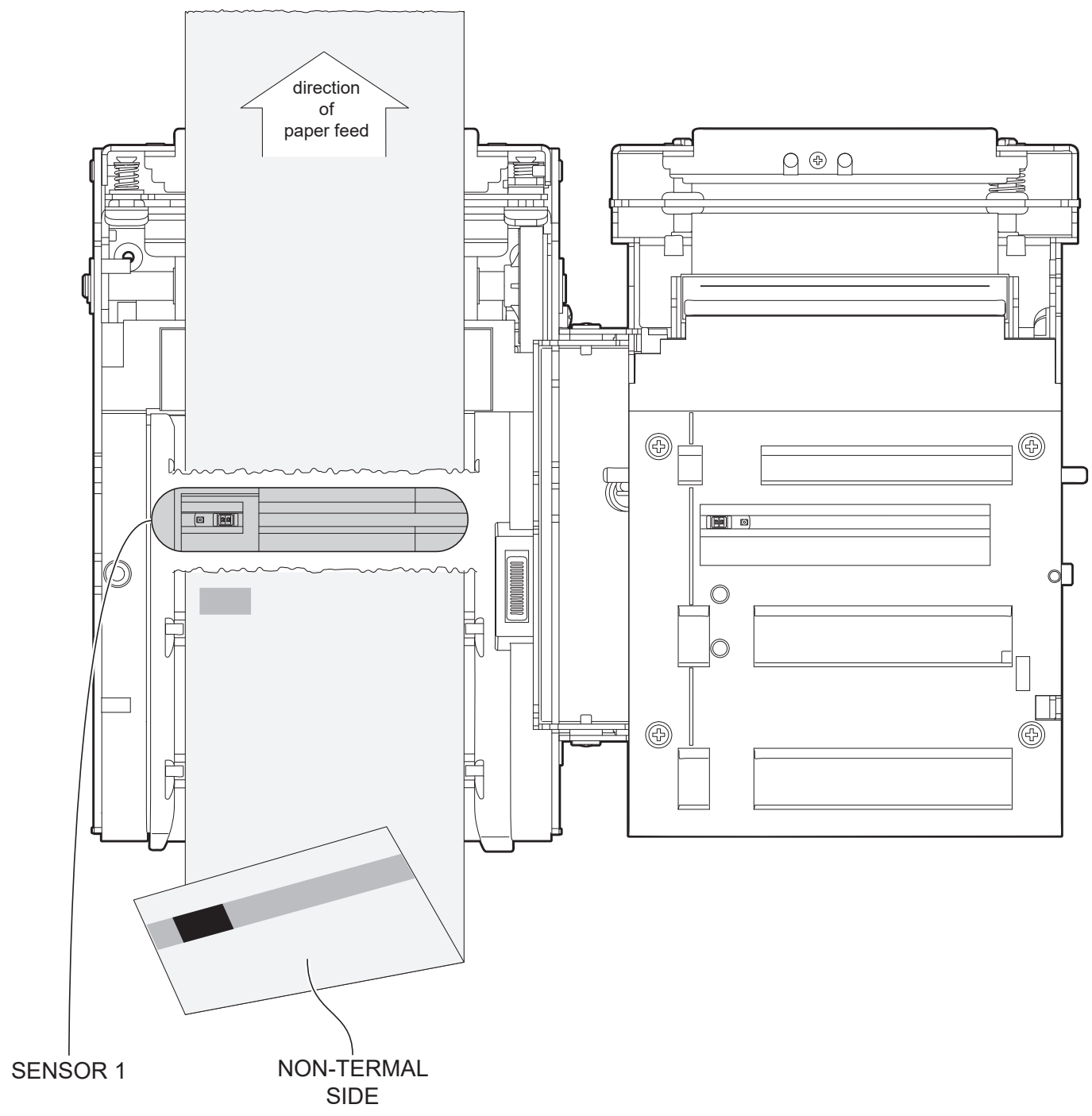
To do this, you must enable the parameter “Black mark position” during the setup procedure (see [chapter 6](#)) and set the correct value of this parameter as described in the following table.

SENSOR USED	VALUE OF THE “BLACK MARK POSITION” PARAMETER	USING MODE OF SENSORS	BLACK MARK TYPE
-	Disabled	-	Alignment disabled
1	Bottom	Reflection	Black mark printed on the non-thermal side of paper
2	Top	Reflection	Black mark printed on the thermal side of paper
1 + 2	Transparent	Transparence	Hole between tickets or gap between labels



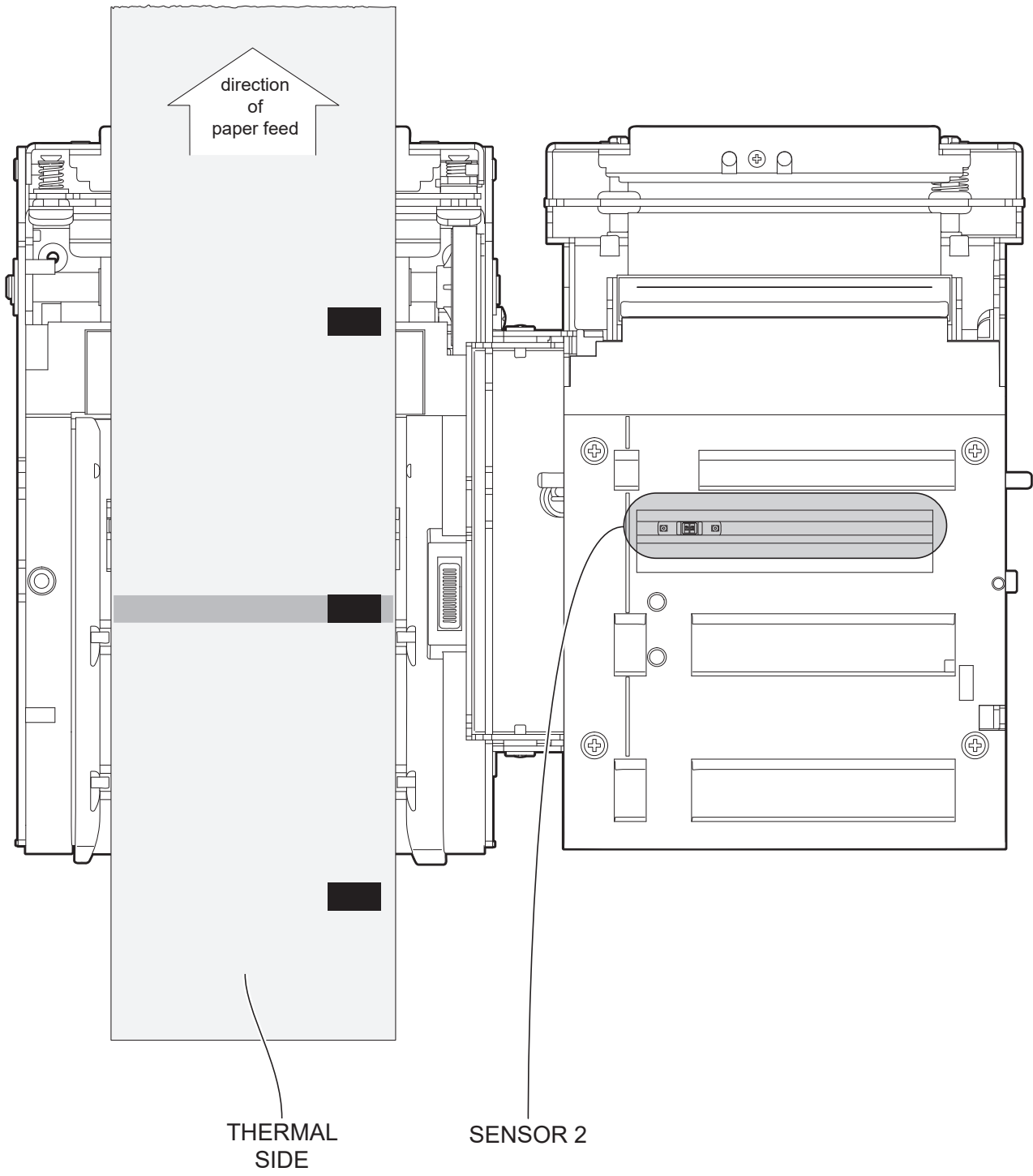
The following figures show the usable format of paper and the corresponding sensors used for alignment:

Paper with black mark on the non-thermal side



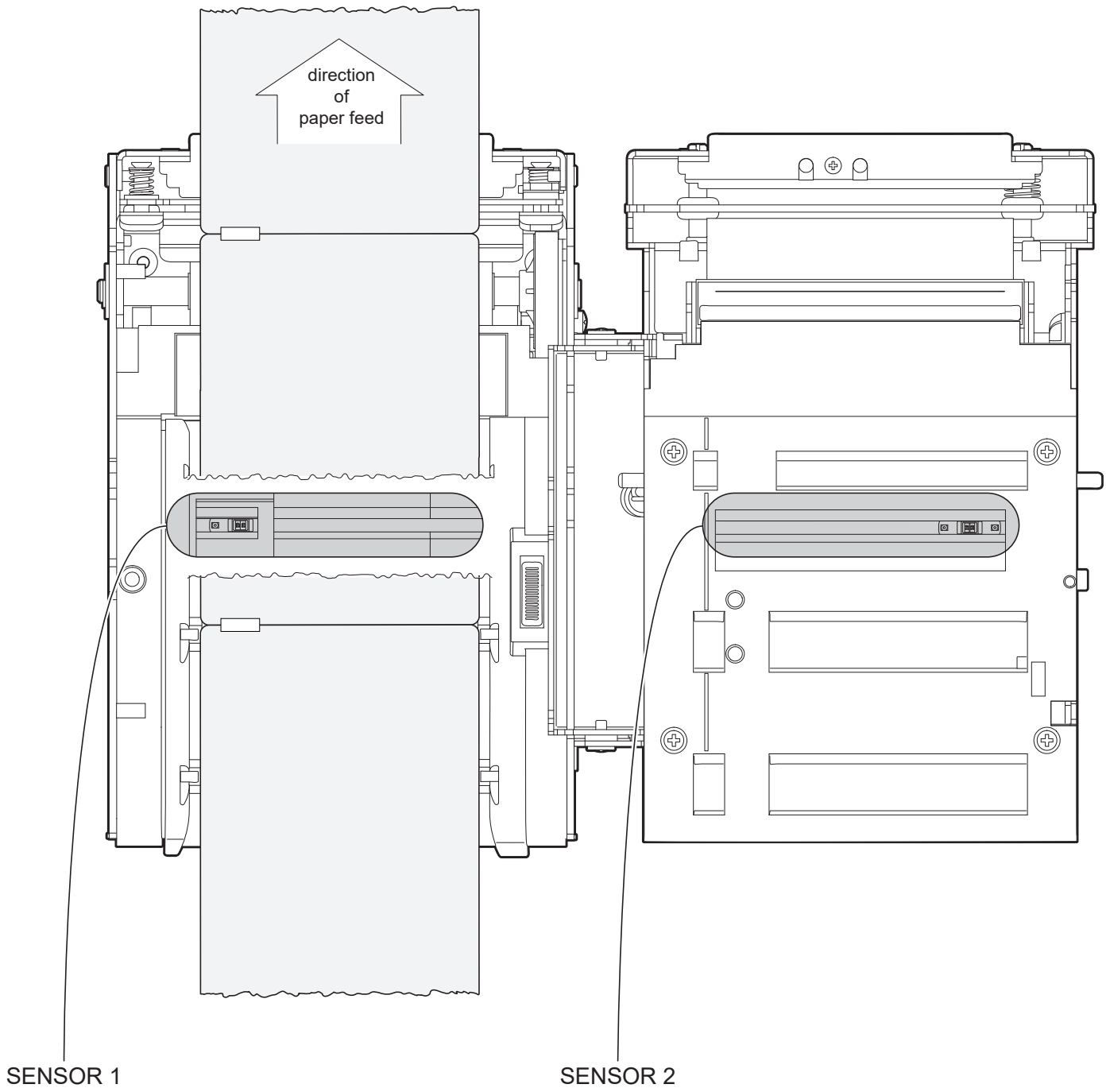


Paper with black mark on the thermal side



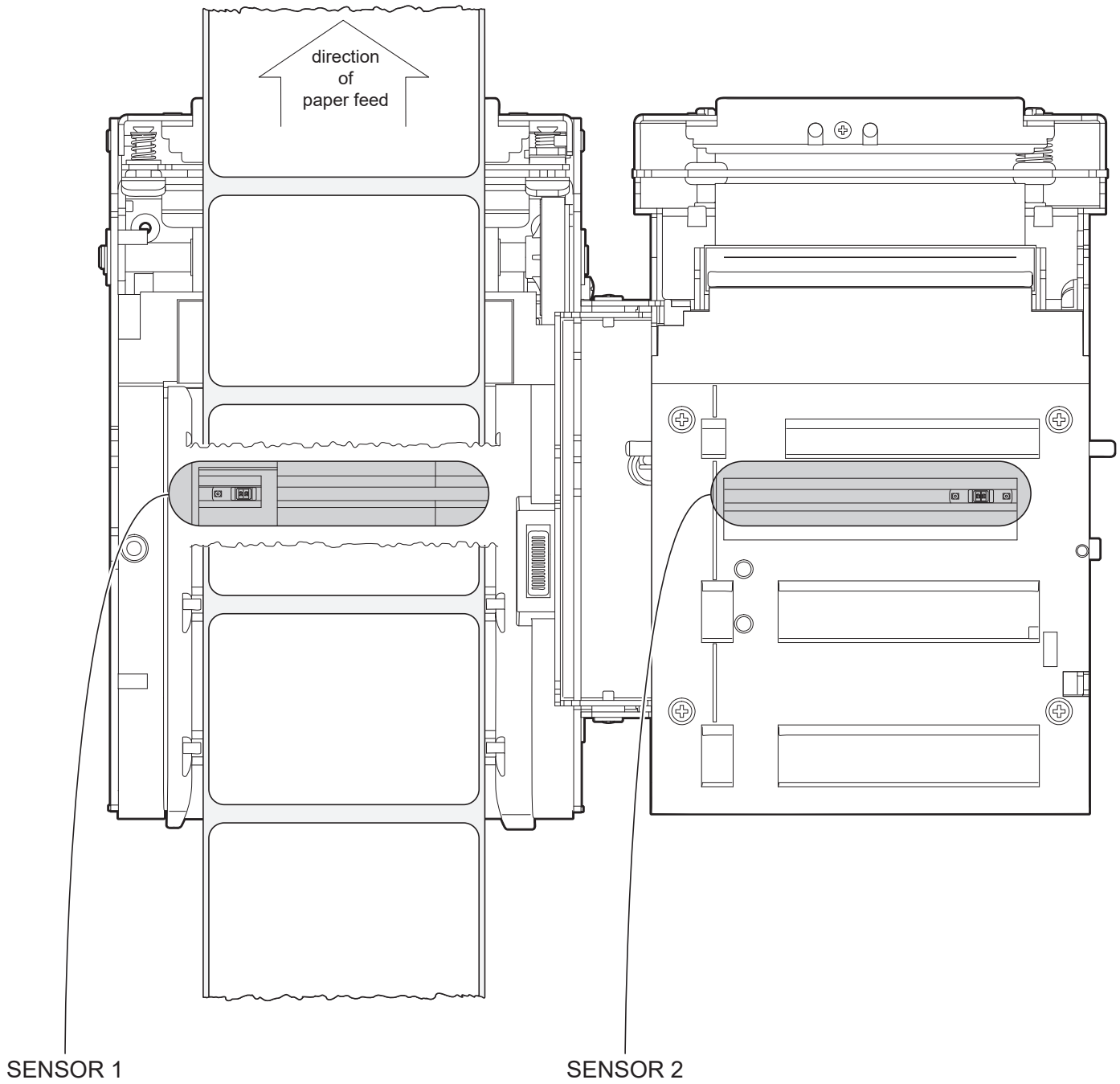


Tickets with hole





Paper with labels
(KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
TK202III, TK302III)



7.2 Calibration

The sensor calibration occurs automatically and consists in adjusting the quantity of light emitted to match the degree of whiteness of the paper used and the degree of black of the mark printed on paper.

The device automatically performs the self-calibration during the setup procedure only if the “Black mark position” parameter is set to a value other than “Disabled” (see [chapter 6](#)). Otherwise, the self-calibration can be started manually by pressing the S1 key during power-up.

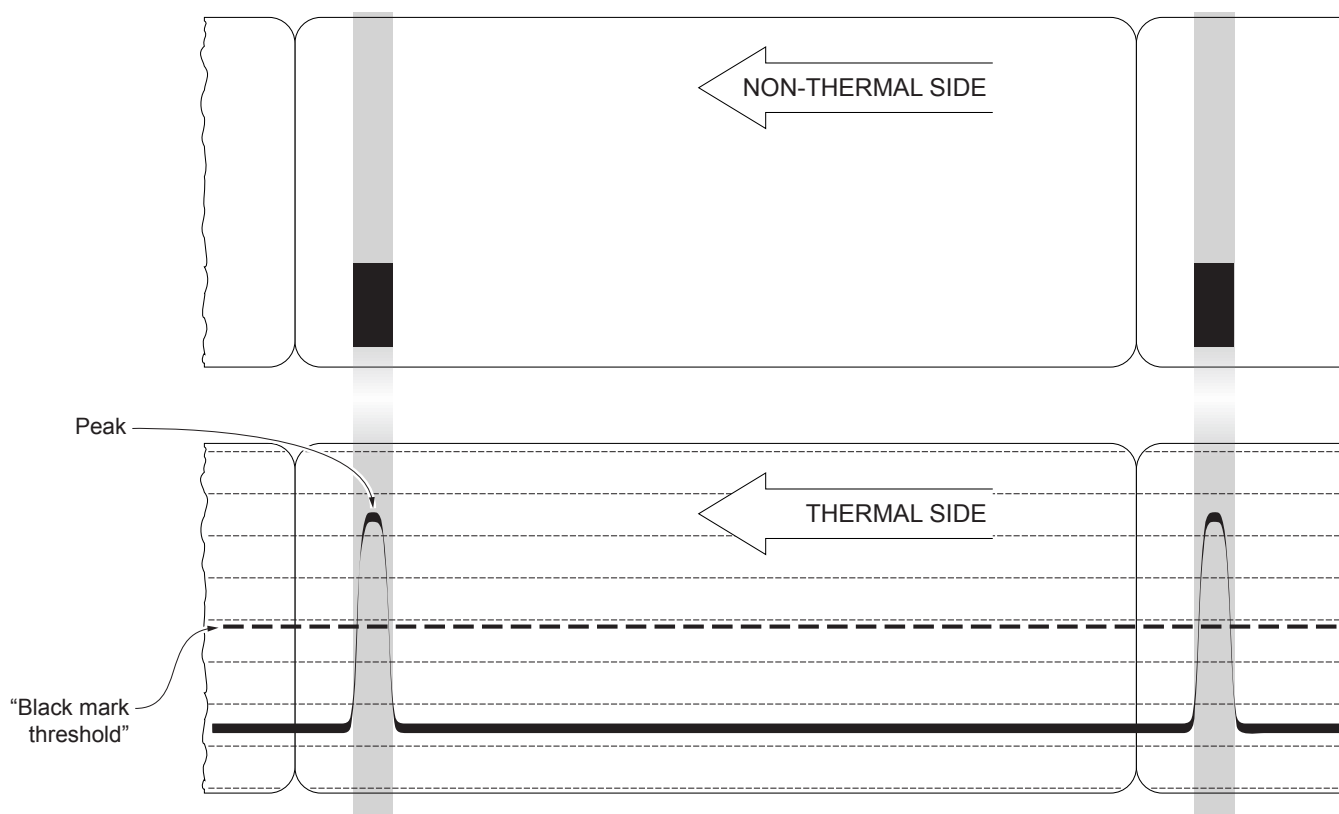
When self-calibration starts, the device performs some paper feeds and then it prints the calibration result and the value of the PWM duty-cycle of the alignment sensor driver so that it can be perform an optimal black mark detection:

```
Autosetting black mark : OK
PWM Duty Cycle : 85.3%
```

The “Autosetting black mark” parameter indicates the result of the self-calibration procedure; OK will appear if it has been successful, NOT OK will appear if the procedure has failed.

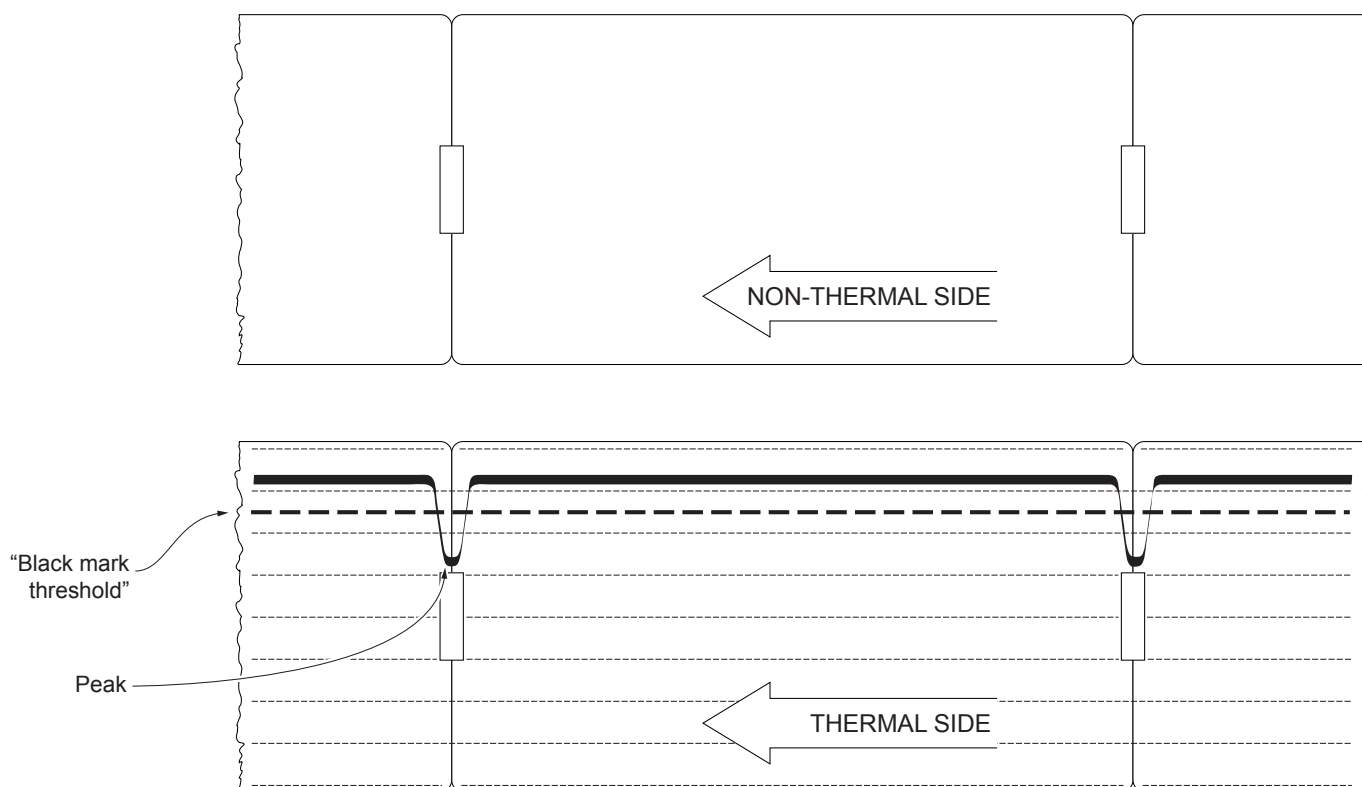
After the printing of the procedure result, the device offers the execution of the function of paper characterization “Characterize Paper” and the change of the “Black mark threshold” parameter which represents the detection threshold of the black mark. Choosing the “Yes” value for the “Characterize Paper” parameter, the device prints a graphic representation (see following figures) of the outgoing voltage of the alignment sensor (expressed as a percentage) and the “Black mark threshold” value. This graphic representation is useful to set the most suitable value to assign to the “Black mark threshold” parameter and then to better identify the optimal threshold value which takes into account the variations of the signal and the small oscillations around zero.

The following figure shows an example of paper with the non-thermal paper printed with black marks: the outgoing voltage is constant while passing the white paper between two black marks and presents a peak at each black mark. In this case, the optimal value for the “Black mark threshold” parameter is placed about half of the peak.

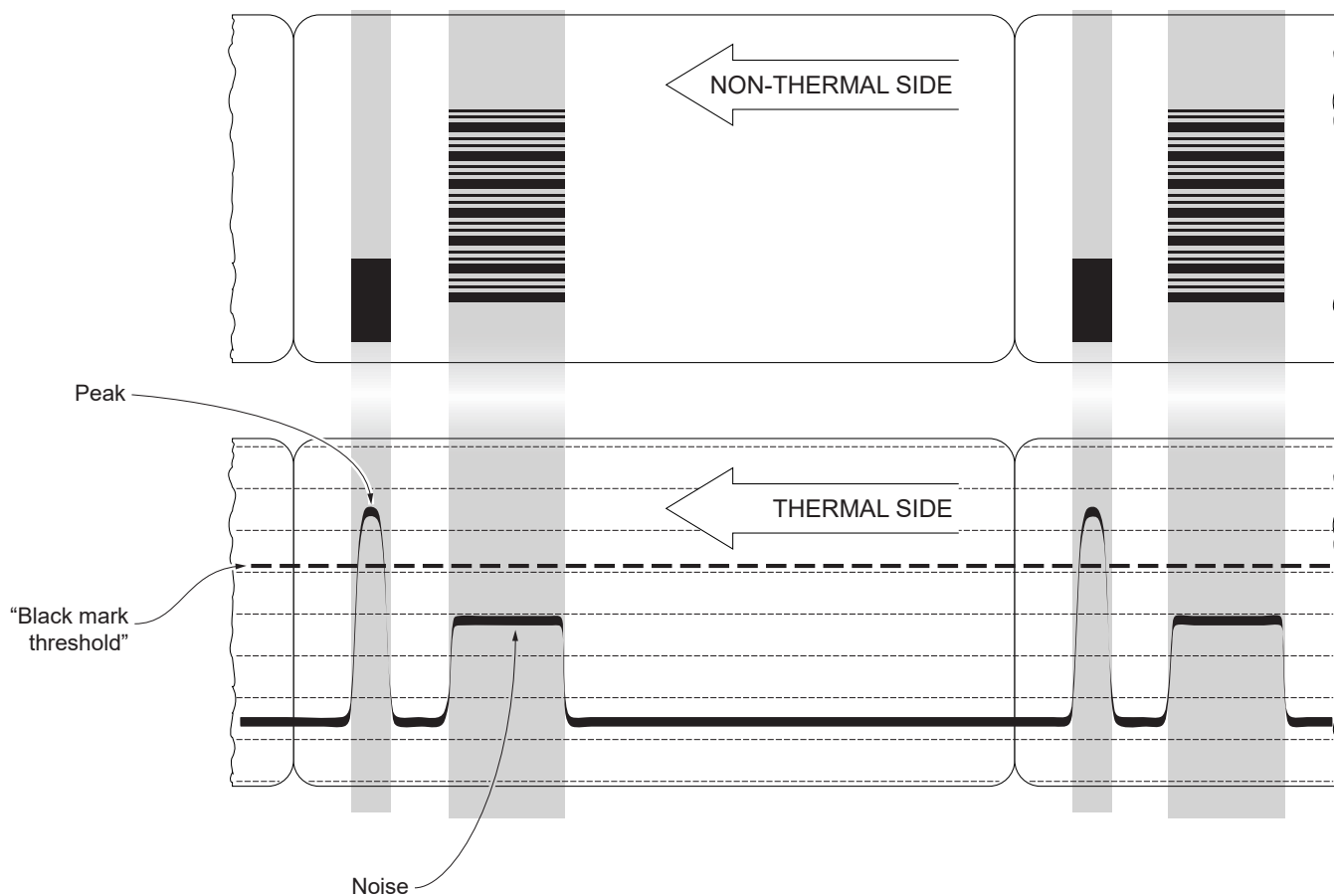




The following figure shows an example of paper with holes: the outgoing voltage is constant while passing the paper between two holes and presents a variation at each hole. In this case, the optimal value for the “Black mark threshold” parameter is placed about half of the variation.



The following figure shows an example of paper with the non-thermal paper printed with black marks and other graphics (for example, a barcode): the outgoing voltage is constant while passing the white paper between two black marks, presents a peak at each black mark and presents some “noise” at each barcode. In this case, the optimal value for the “Black mark threshold” parameter is located about halfway between the peak value and the maximum value of the “noise” (as shown in figure):



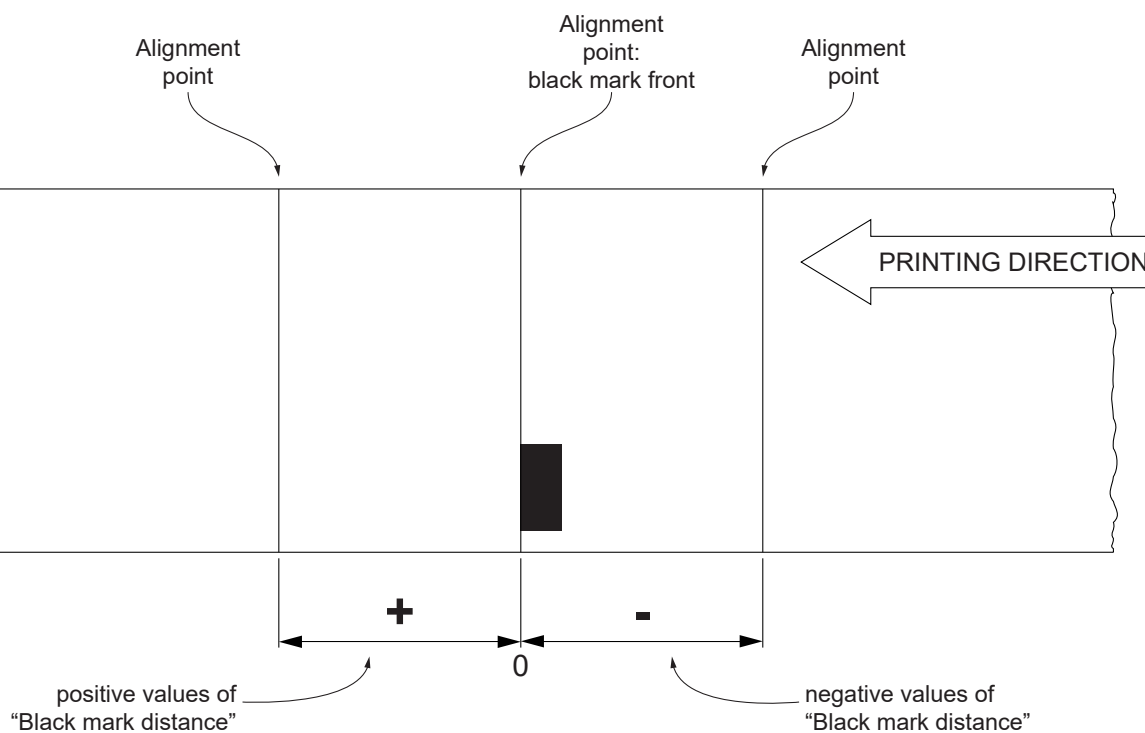
If the maximum value of “noise” read by the sensor is very close to the peak value, it might be difficult to place the value of the “Black mark threshold” at an intermediate point. In these cases, it is mandatory that the portion of paper between the point of printing end and the front of black mark is completely white (no graphics). In this way, the only next graphic detected by the sensor for alignment after the printing end will be the black mark.

7.3 Alignment parameters

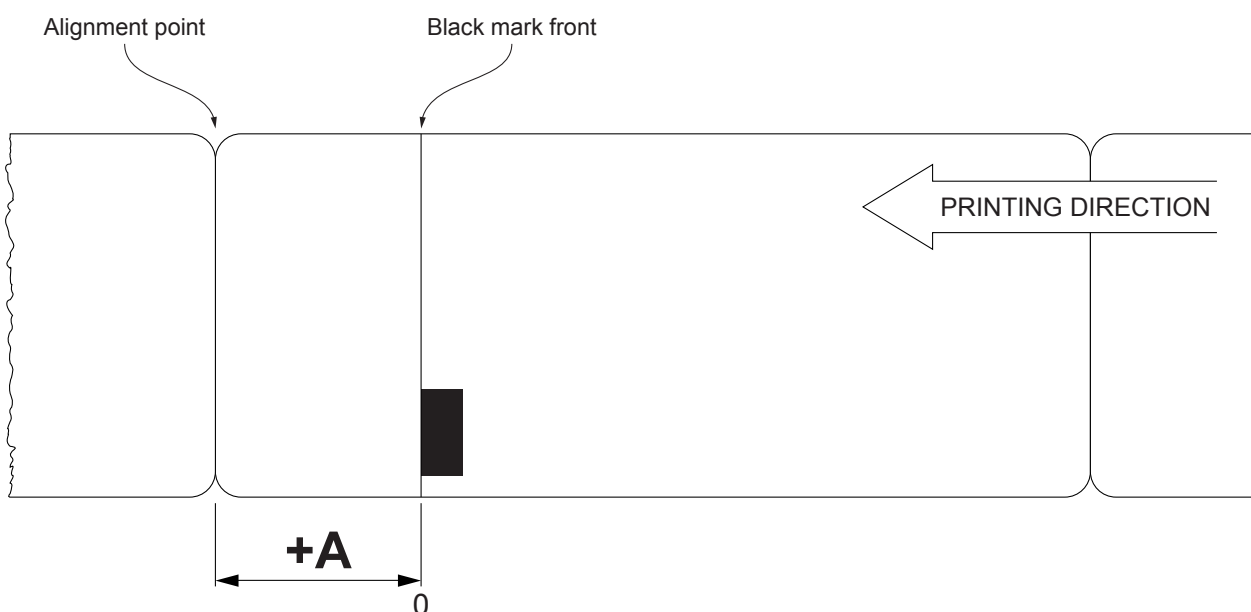
The “alignment point” is defined as the position inside the ticket to use for the black mark alignment. The distance between the black mark edge and the alignment point is defined as “black mark distance”.

The value of “black mark distance” varies from a minimum value of -5 mm to a maximum value of 66 mm.

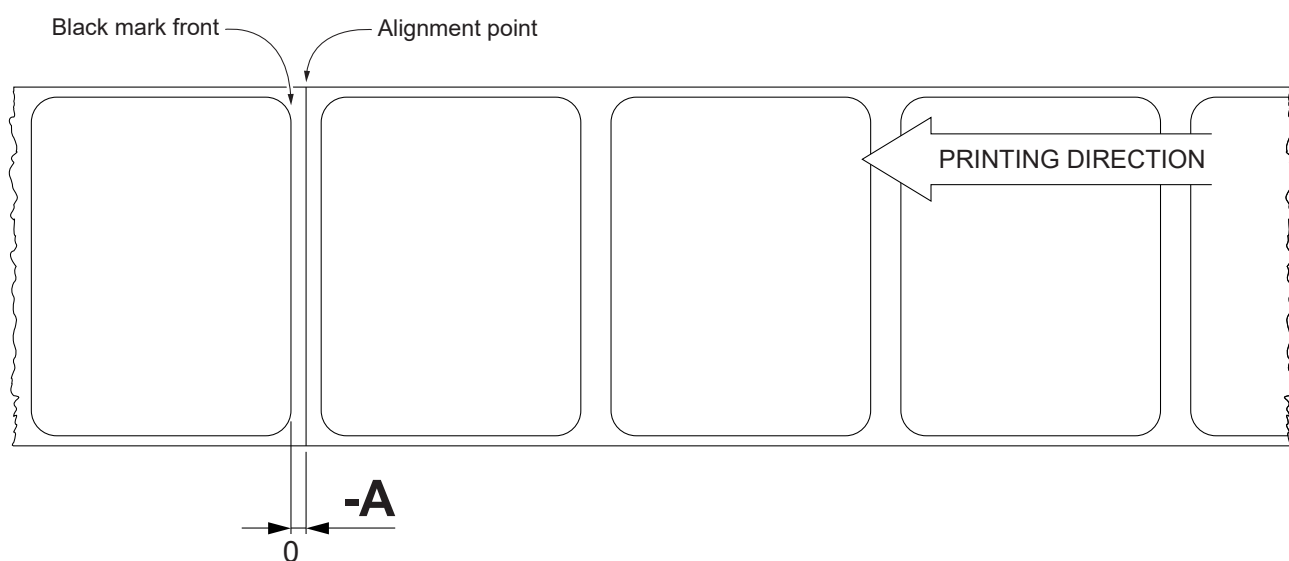
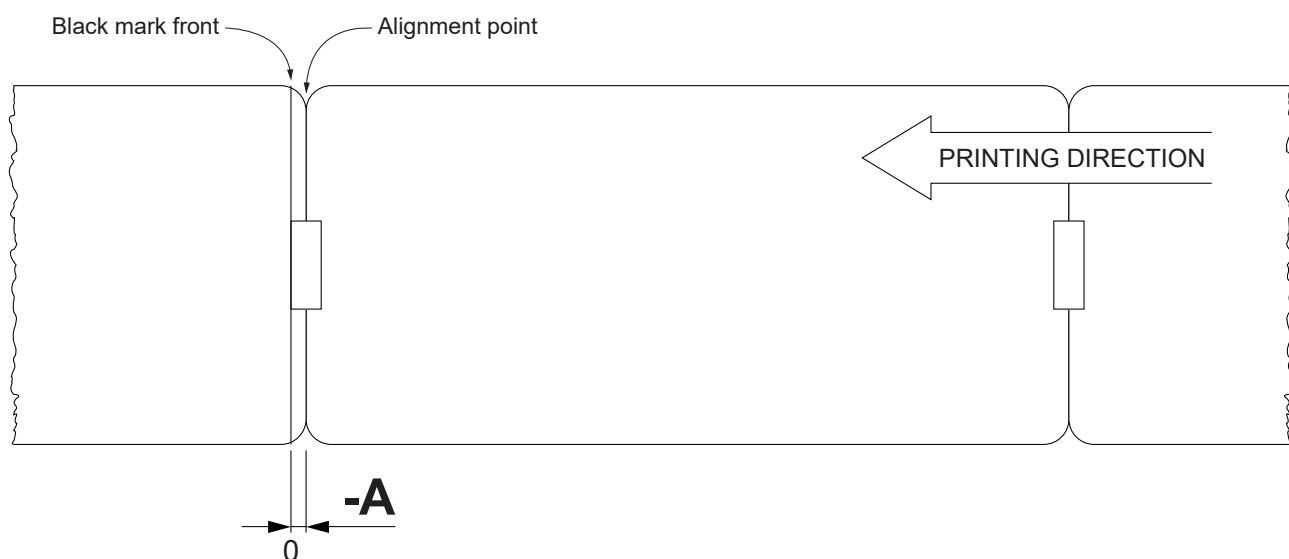
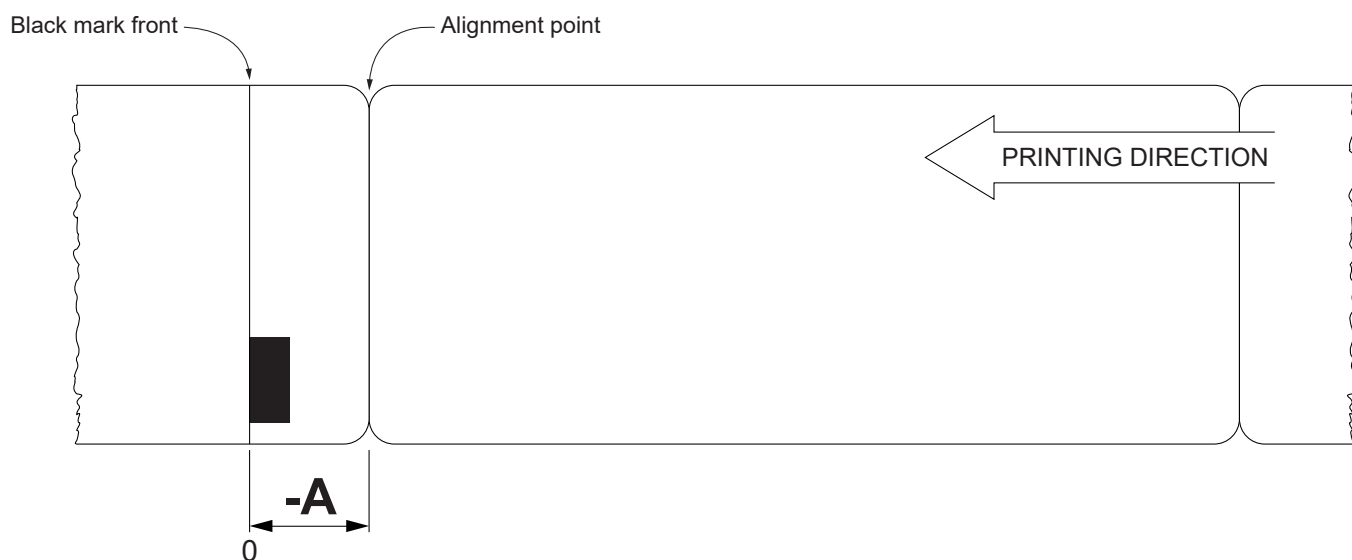
If the setup parameter “Black mark distance” value is set to 0, the alignment point is set at the beginning of the black mark (see following figure):



The following figure shows an example of paper with alignment point set by a positive value of “black mark distance” (“Black mark distance” = + A).

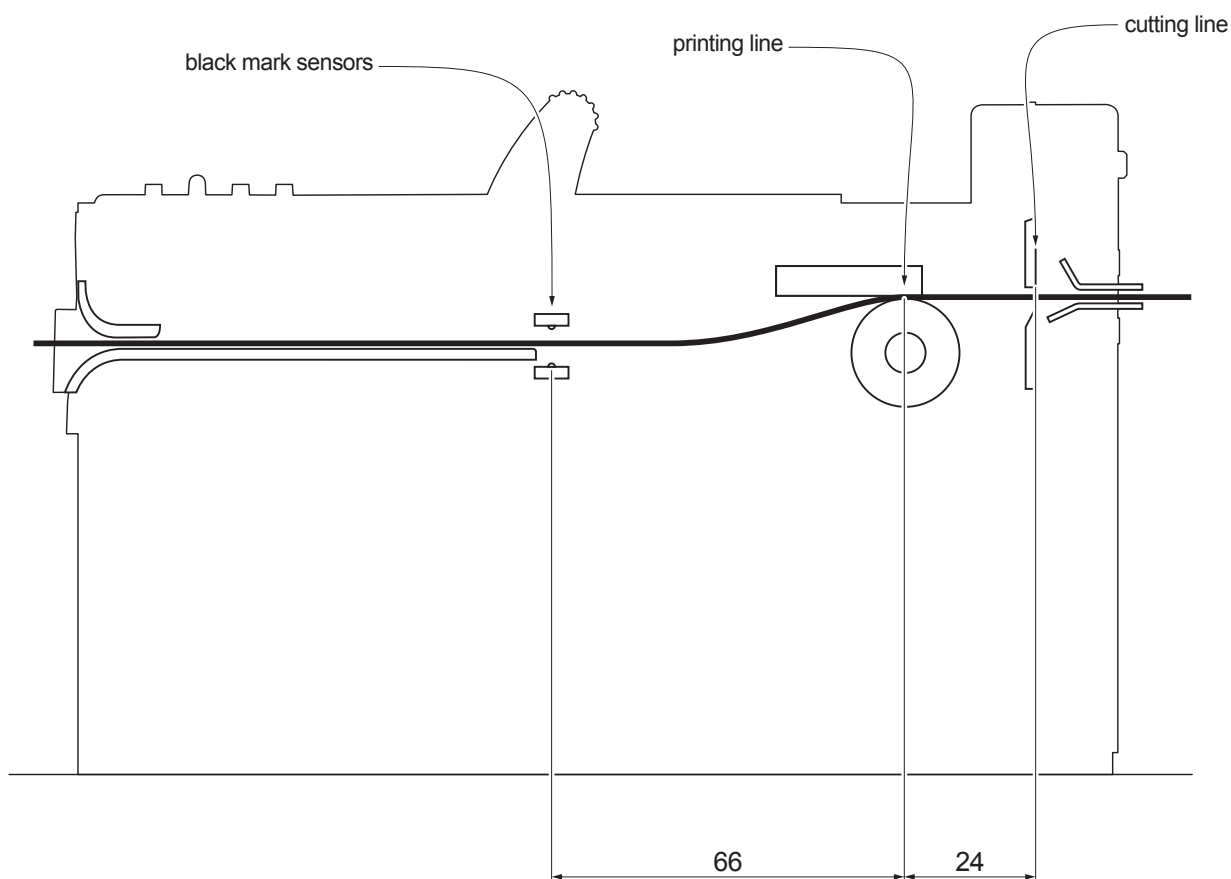


To set a negative value of "black mark distance" is useful when the alignment point refers to the black mark placed on the previous ticket or when the desired cutting line is placed in the middle of the alignment black mark (for example, for paper with holes or gap). In the following images, the value of the parameter "Black mark distance" is set to $-A$.





The following figure shows a simplified section of the device with the paper path and the distances (in millimetres) between the alignment sensors, the print head and the cutter (cutting line, only for models with autocutter).



CUSTOM POS emulation

To define the alignment point you need to set the setup parameters that compose the numerical value of the parameter “Black mark distance” (see [chapter 6](#)).

For example, to set a black mark distance of 15 mm, the parameters must be set on the following values:

Black mark distance sign	: +
Black mark distance [mm x 10]	: 1
Black mark distance [mm x 1]	: 5
Black mark distance [mm x .1]	: 0

The “Black mark distance” parameter, may be modified as follows:

- during the setup procedure of the device (see [chapter 6](#));
- by commands (refer to the commands manual of the device);
- by file (see [paragraph 6.3](#));
- by software (see [paragraph 6.2](#)).

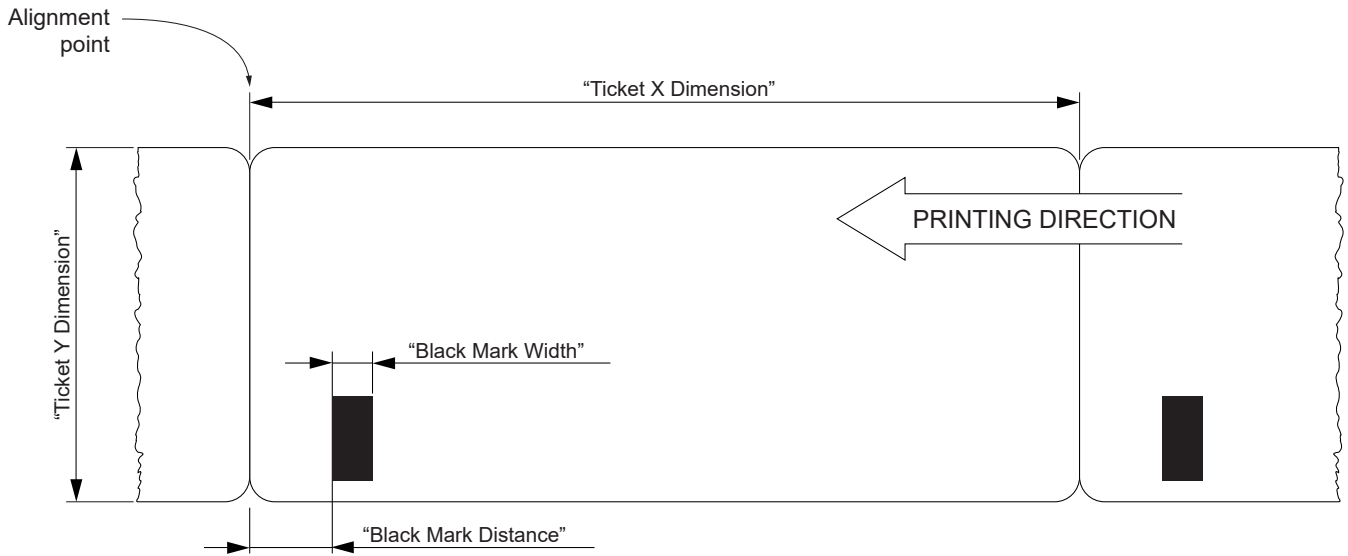
SVELTA emulation

The ticket features and the alignment parameters, may be modified as follows:

- by using the parameters of the <LHT> command (refer to the commands manual of the device)
- by file (see [paragraph 6.3](#));
- by software (see [paragraph 6.2](#)).

The following figure shows some of the parameters for alignment:

- "Ticket X Dimension"
- "Ticket Y Dimension"
- "Black mark Width"
- "Black mark Distance"

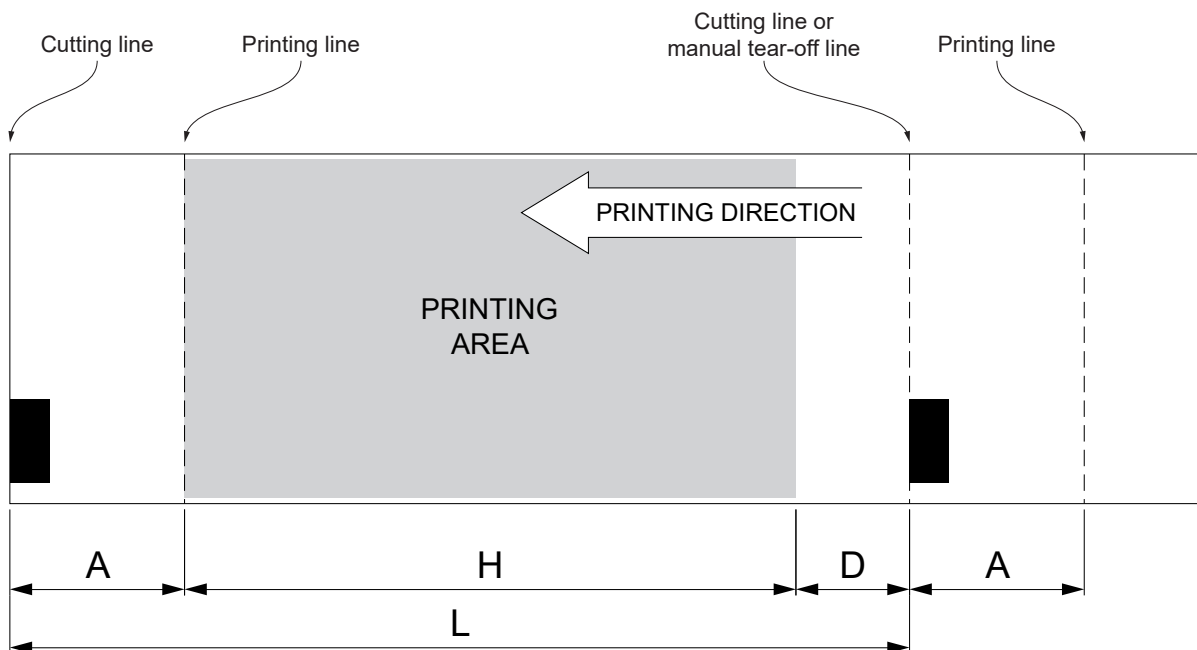


7.4 Printing area

In order to print ticket containing only one black mark and to not overlay printing to a black mark (that will make it useless for the next alignment), it is important to well calibrate:

- the length of the printing area of ticket according to the inter-black mark distance;
- the value for the paper recovery after a cut or a manual tear-off.

The following figure shows an example of tickets with “Black mak Distance” parameter set to 0:



A “Non-printable area” generated from:

“Distance between cutter/print head”- “Value for the paper recovery after a cut” for models with autocutter or
 “Distance between manual tear-off line/print head”- “Value for the paper recovery after a manual tear-off” for models without autocutter

where:

“Distance between cutter/print head” =

“Distance between manual tear-off line/print head” = 24 mm (fixed distance)

“Value for the paper recovery after a cut” =

“Value for the paper recovery after a manual tear-off”= 9 mm (in CUSTOM/POS emulation)
 24 mm (in SVELTA emulation)

In CUSTOM/POS emulation, after a performed cut or a manual tear-off, the paper is not completely recovered (in order to avoid jamming when using of thin paper). Otherwise, in this emulation you can use the command 0x1C 0xC1 to modify the “Value for the paper recovery after a cut/manual tear-off” (refer to the commands manual of the device).

The SVELTA emulation, instead, it is designed specifically for ticketing and then for using with heavy paper, which avoids the risk of paper jams. After performing a cut or a manual tear-off, the device completely recovers the paper



- H Distance between the first and the last printing line, called “Height of the printing area”.
- L Distance between an edge of the black mark and the next one, called “Inter-black mark distance”.
- D Automatic feed for alignment at the next black mark.

To use all the black marks on paper, you must comply with the following equation:

$$H + A \leq L$$

The height of the printing area (H) can be increased to make no progress on alignment (D) but no further.



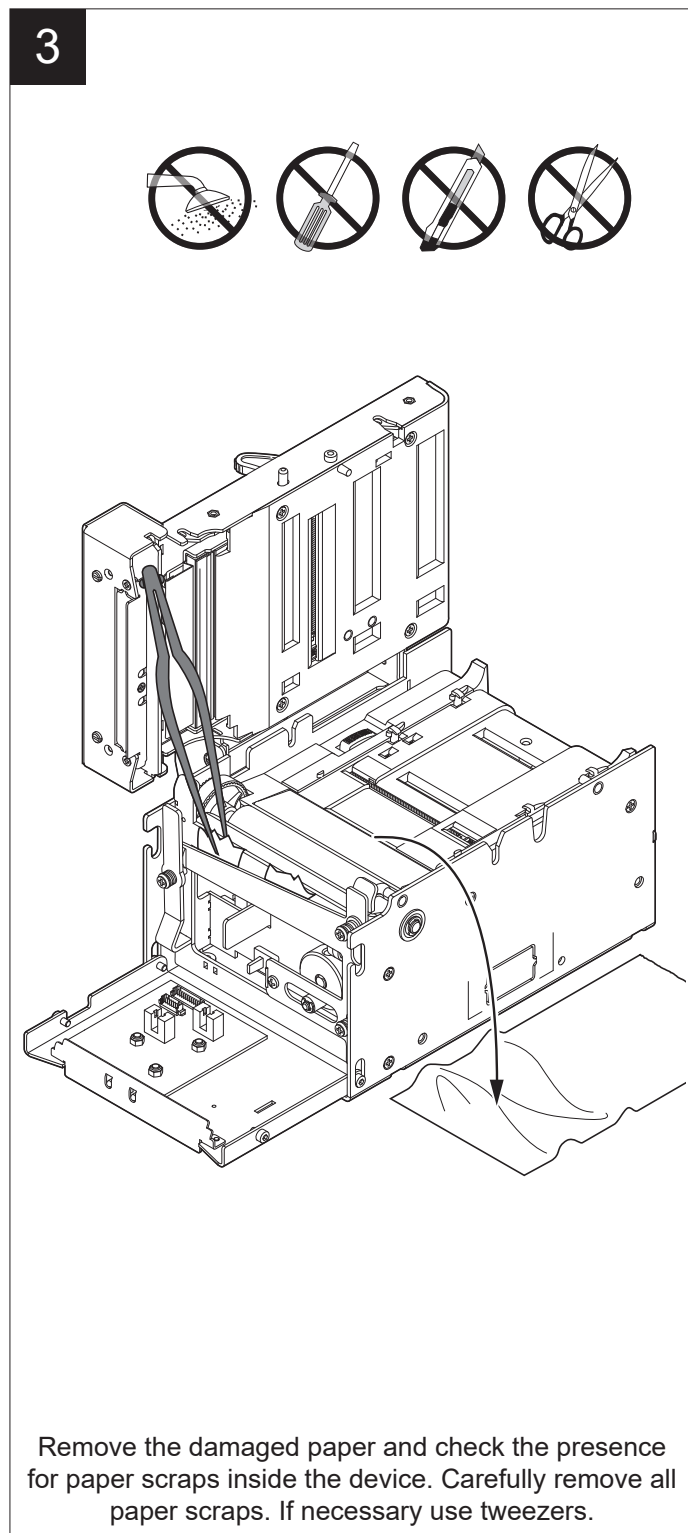
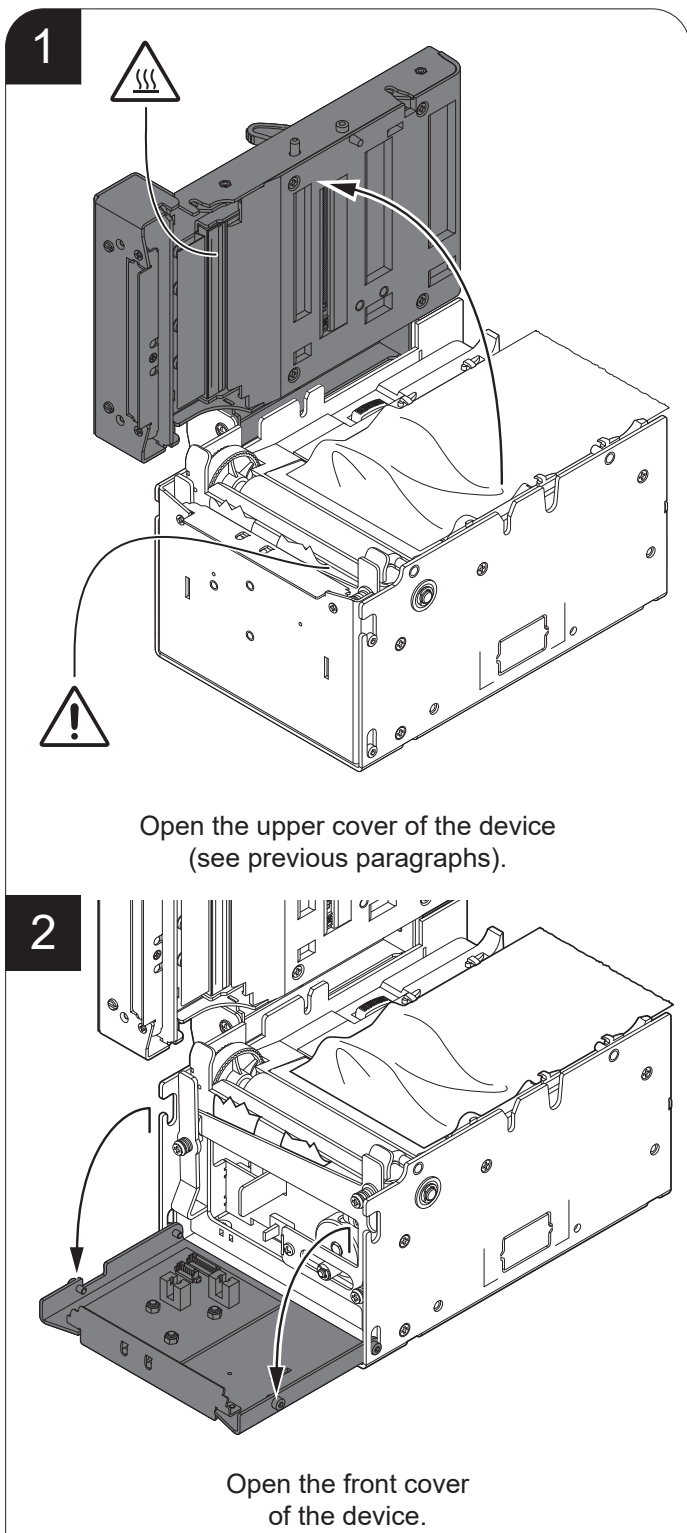


8 MAINTENANCE

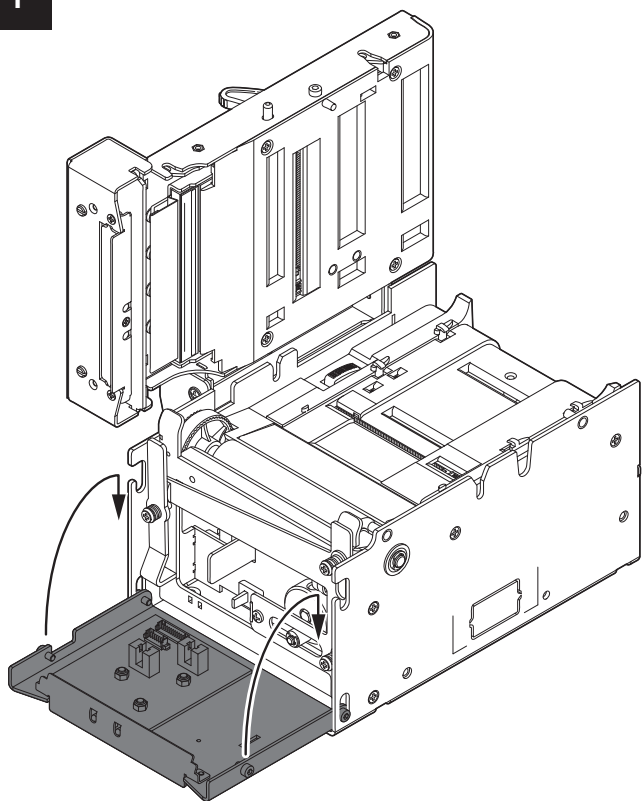
8.1 Printer paper jam

In the following sequence of images, the procedure for solving the paper jam inside the printer is described. For some models, only the internal printer group is represented.

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL

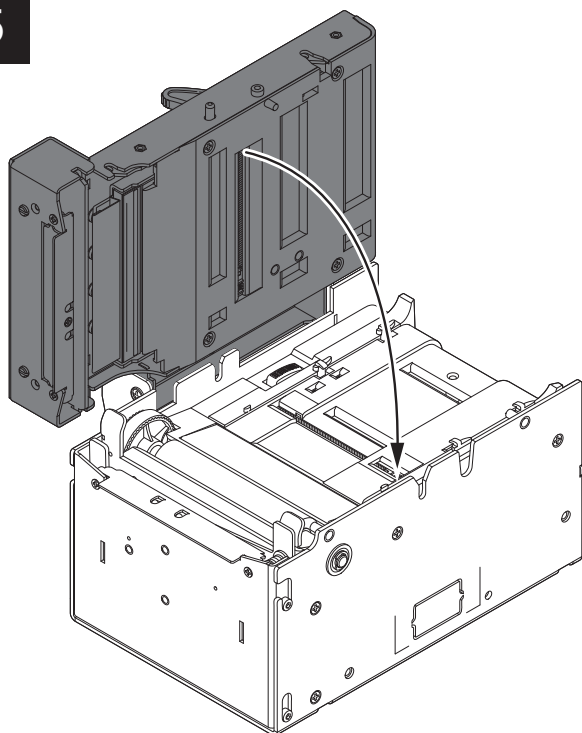


4



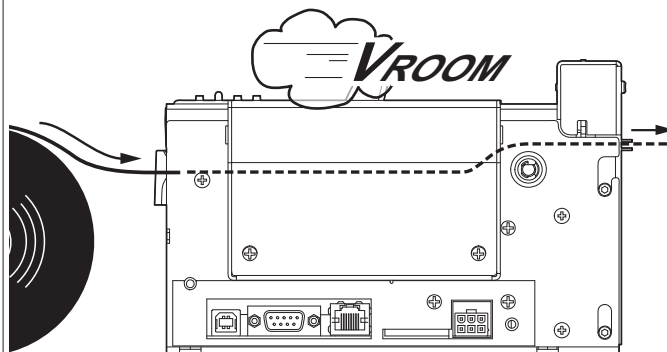
Close the front cover of the device.

5



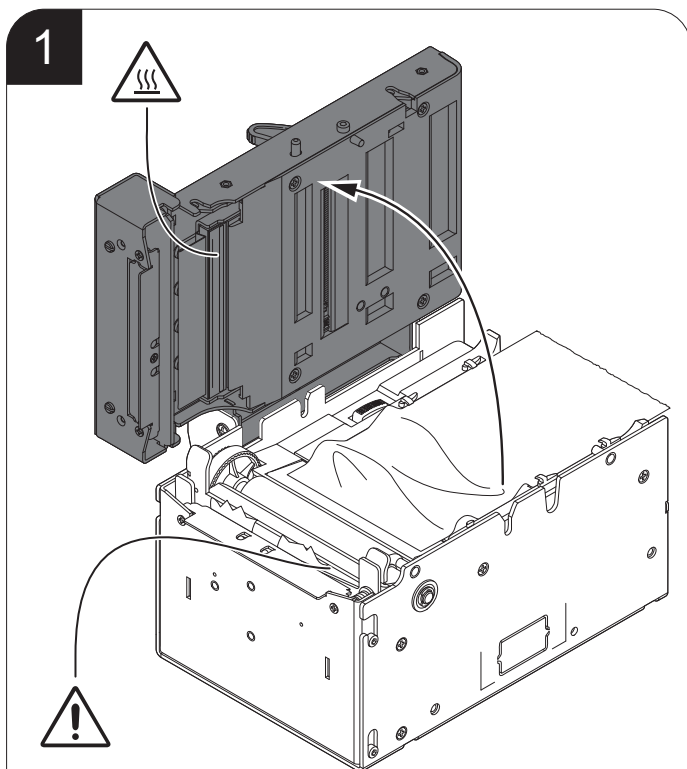
Close the upper cover of the device
(see previous paragraphs).

6

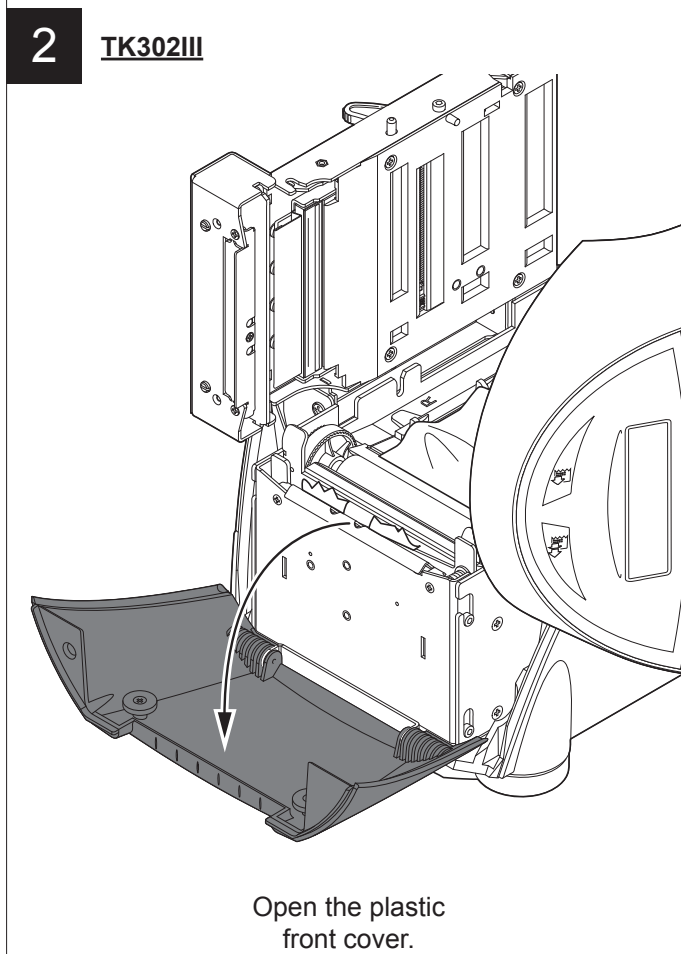


Insert the paper
(see previous paragraphs).

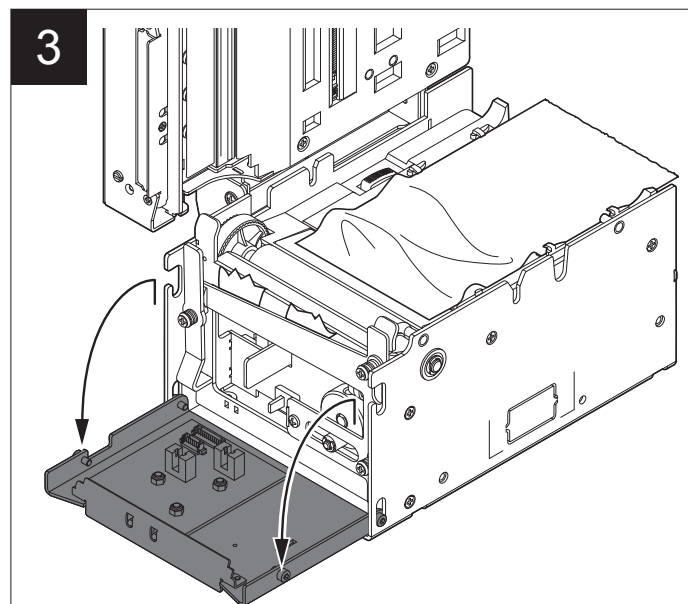
TK302III, TK302III TF



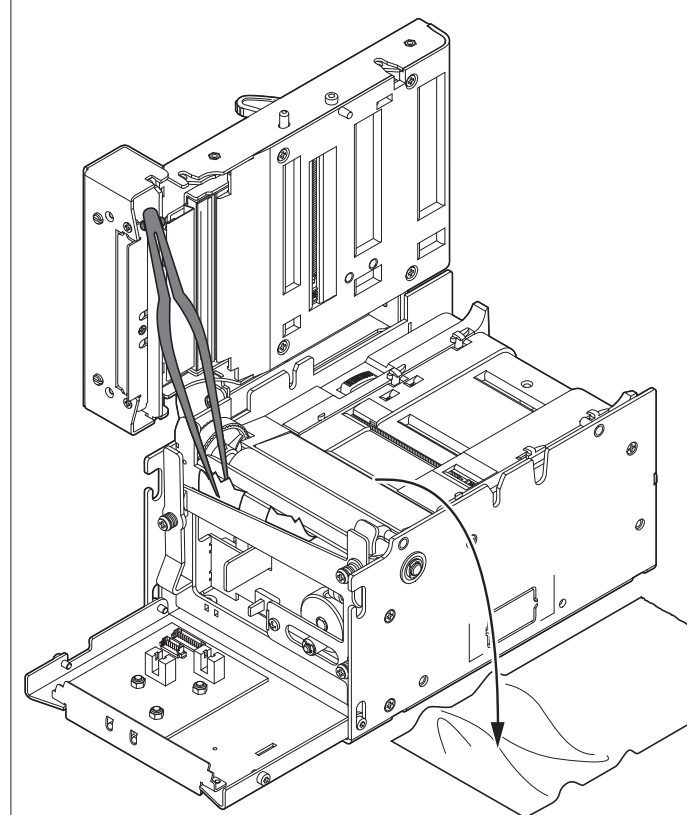
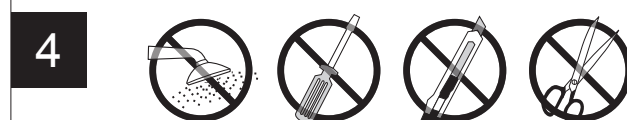
Open the upper covers of the device (see previous paragraphs).



Open the plastic front cover.

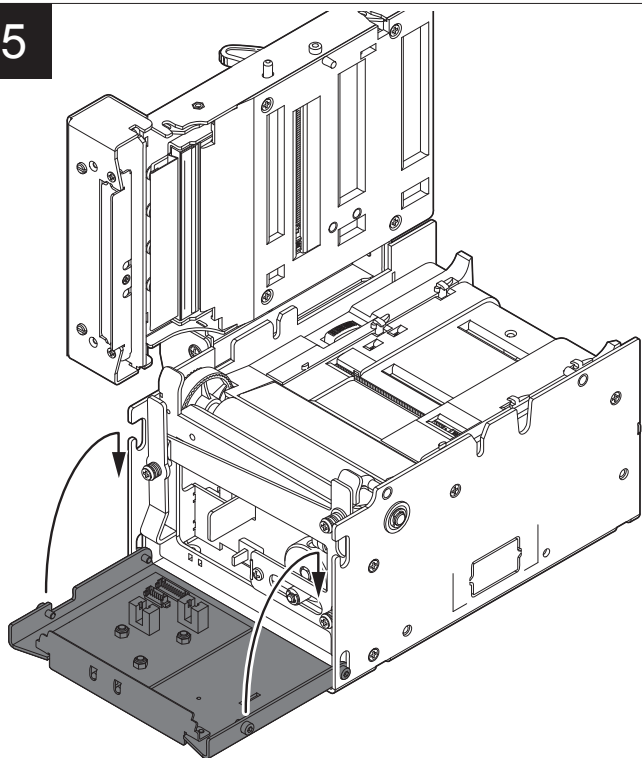


Open the front cover of the device.



Remove the damaged paper and check the presence for paper scraps inside the device. Carefully remove all paper scraps. If necessary use tweezers.

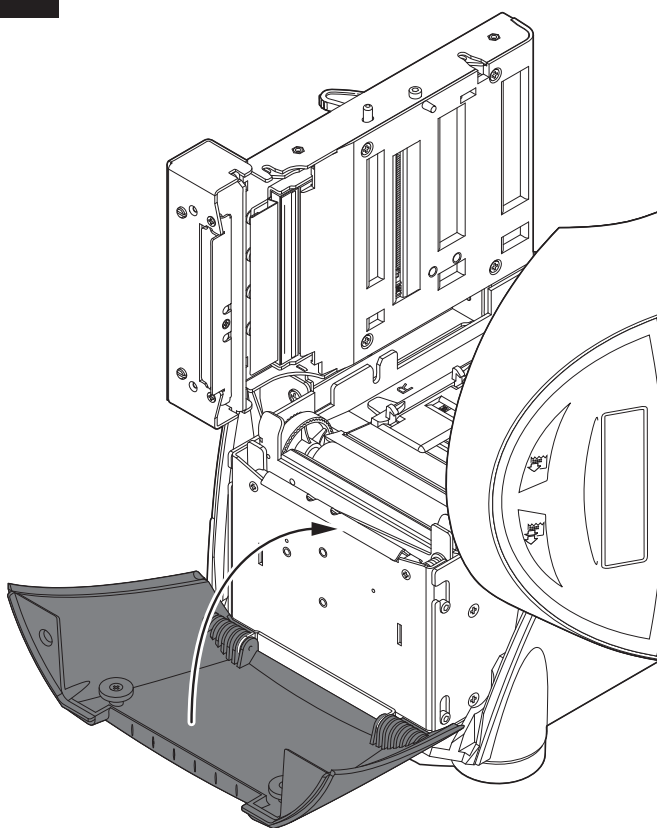
5



Close the front cover of the device.

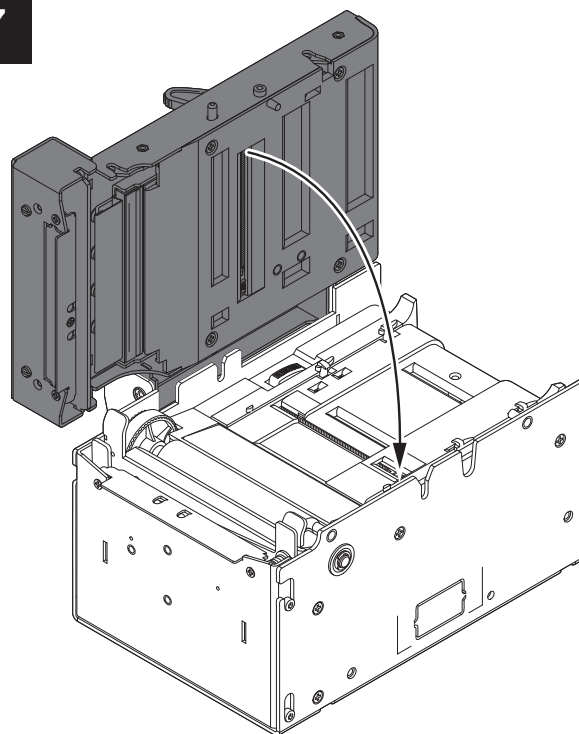
6

TK302III



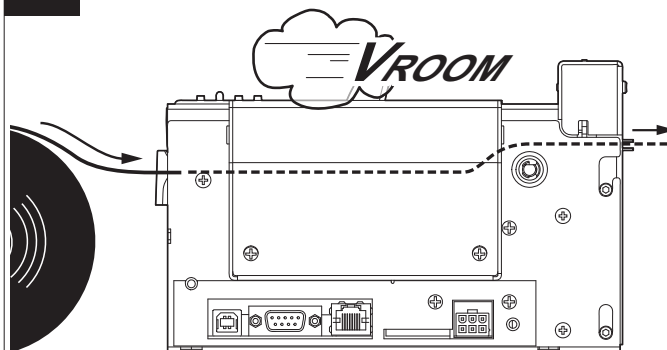
Close the plastic front cover.

7



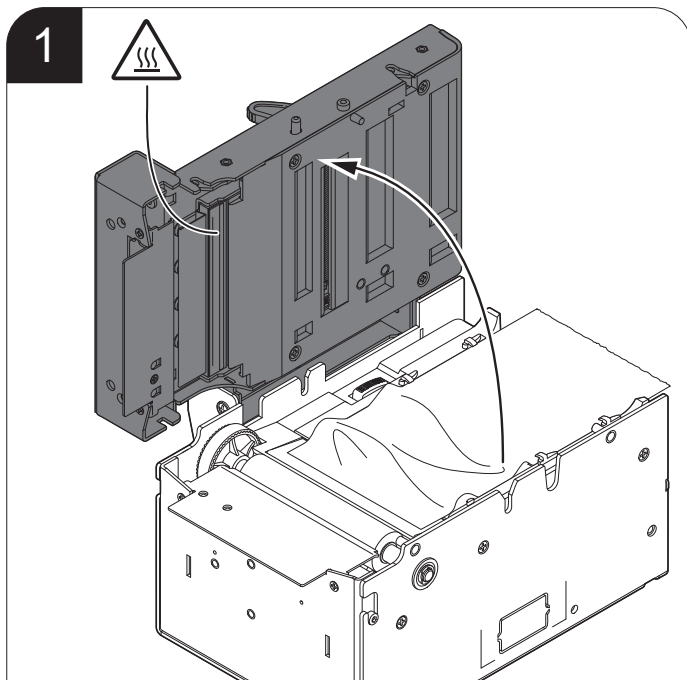
Close the upper covers of the device (see previous paragraphs).

8

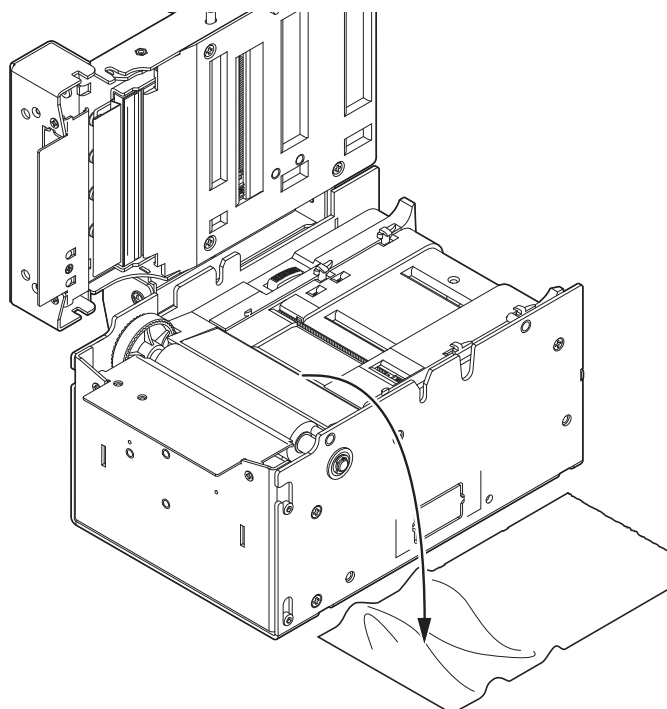
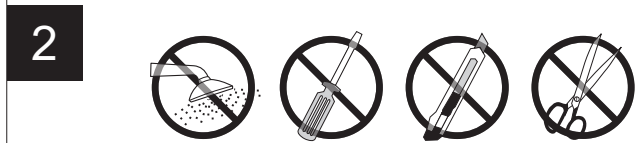


Insert the paper (see previous paragraphs).

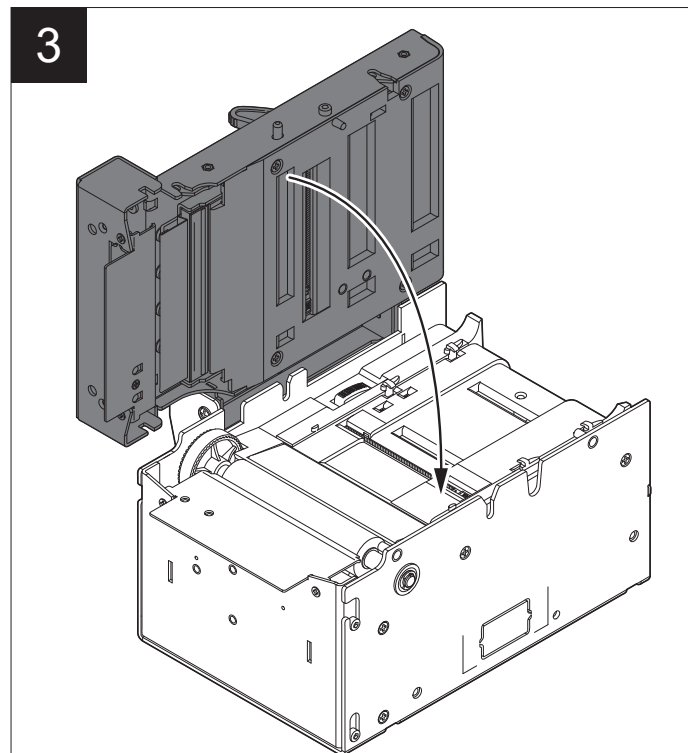
TK202III



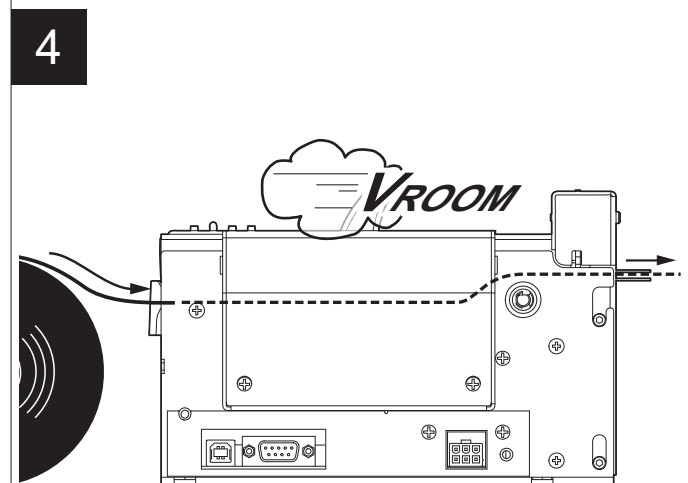
Open the upper covers of the device (see previous paragraphs).



Remove the damaged paper and check the presence for paper scraps inside the device. Carefully remove all paper scraps. If necessary use tweezers.



Close the upper covers of the device (see previous paragraphs).



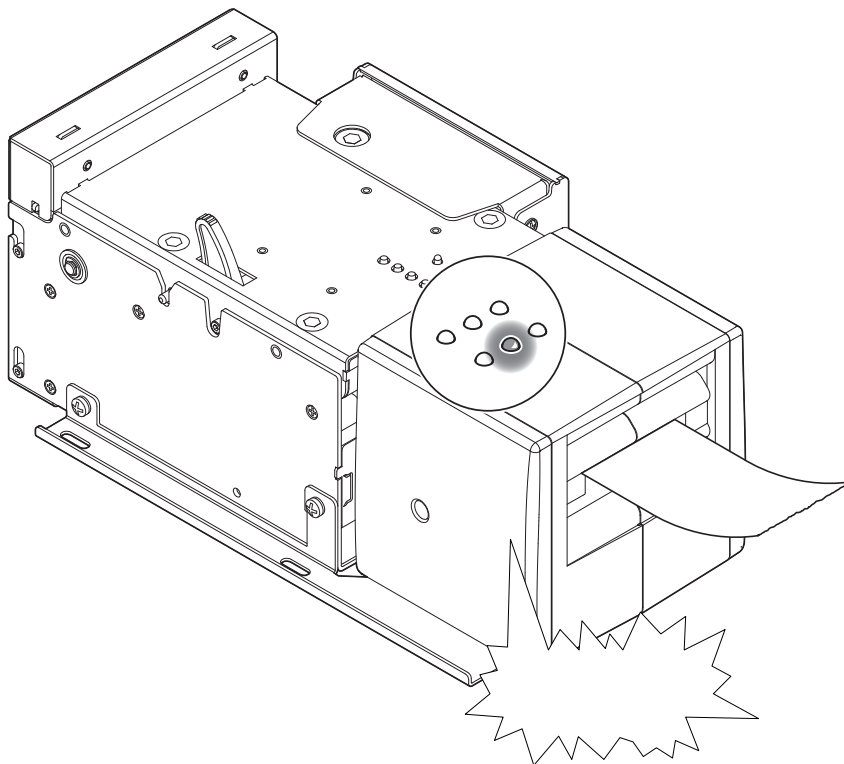
Insert the paper (see previous paragraphs).

8.2 Triple feeder paper jam

KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III TF

In case of paper jam inside the triple feeder, the green led that corresponds to the input paper jammed flashes quickly. In this case, contact the customer service.

1



The green LED for the feeder jammed flashes quickly.

2

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Contact the customer service
(see [chapter 12](#)).

NOTE:

For ease of reference, in some figure is represented only the internal printer without the external chassis.



8.3 Planning of cleaning operations

The regular cleaning of the device keeps the print quality and extends its life.

The following table shows the recommended planning for the cleaning operations. If you use the device in dusty environments, you must reduce the intervals between cleaning operations.

For specific procedures, see [paragraph 8.4](#).

EVERY PAPER CHANGE	
Printhead	Use isopropyl alcohol
Platen roller	Use isopropyl alcohol
Window for barcode reading (only if present)	Use a soft cloth
EVERY 5 PAPER CHANGES	
Autocutter (only if present)	Use compressed air
Paper path	Use compressed air or tweezers
Sensors	Use compressed air
Triple feeder (only if present)	Use the dedicated cleaning kit. Contact the customer service (see chapter 12).
EVERY 6 MONTHS OR AS NEEDED	
Display (only if present)	Use compressed air or a soft cloth Don't use any ammonia-based product.
Case	Use compressed air or a soft cloth

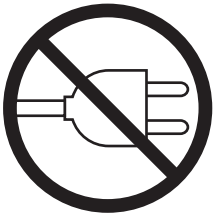


8.4 Cleaning

For periodic cleaning of the device, see the instructions below. For ease of reference, for some models is represented only the printer group without external chassis or triple feeder.

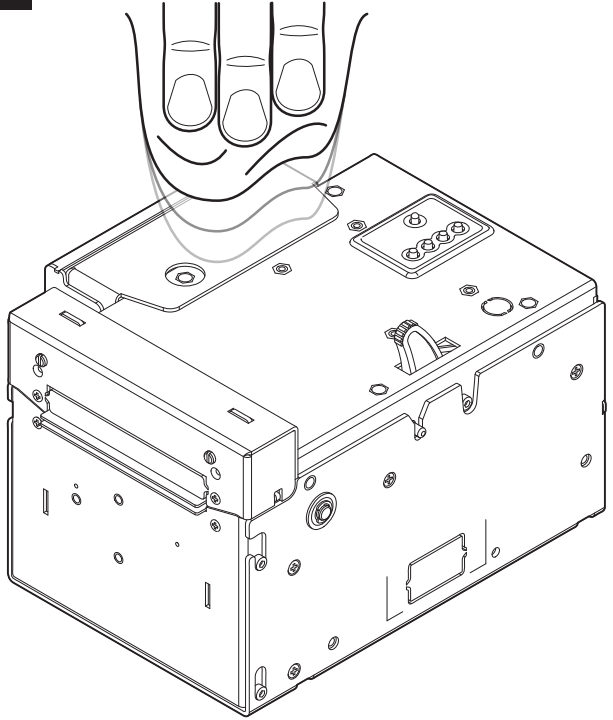
Case

1



Disconnect the power supply cable.

2



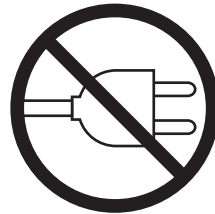
ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the device.



To clean the device,
use compressed air or a soft cloth.

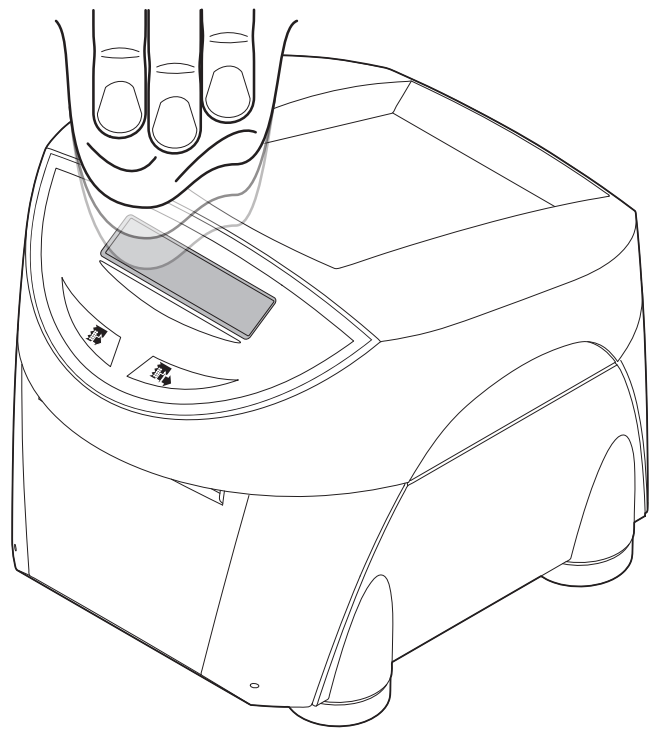
Display

1



Disconnect the power supply cable.

2



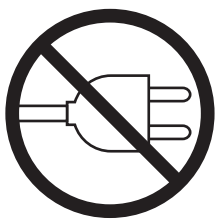
ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
Do not use ammonia-based products .



To clean the display,
use compressed air or a soft cloth.

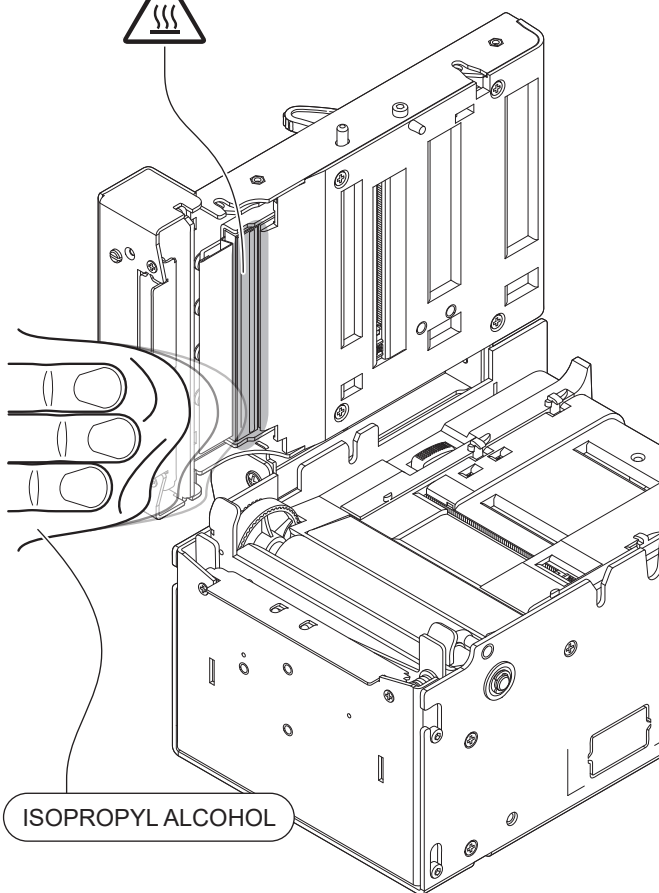
Printhead

1



Disconnect the power supply cable and open the device covers (see previous paragraphs).

2



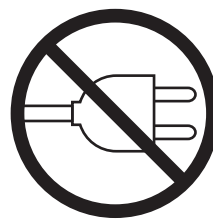
ATTENTION:
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the machine.



Clean the printhead by using a non-abrasive cloth moistened with isopropyl alcohol.

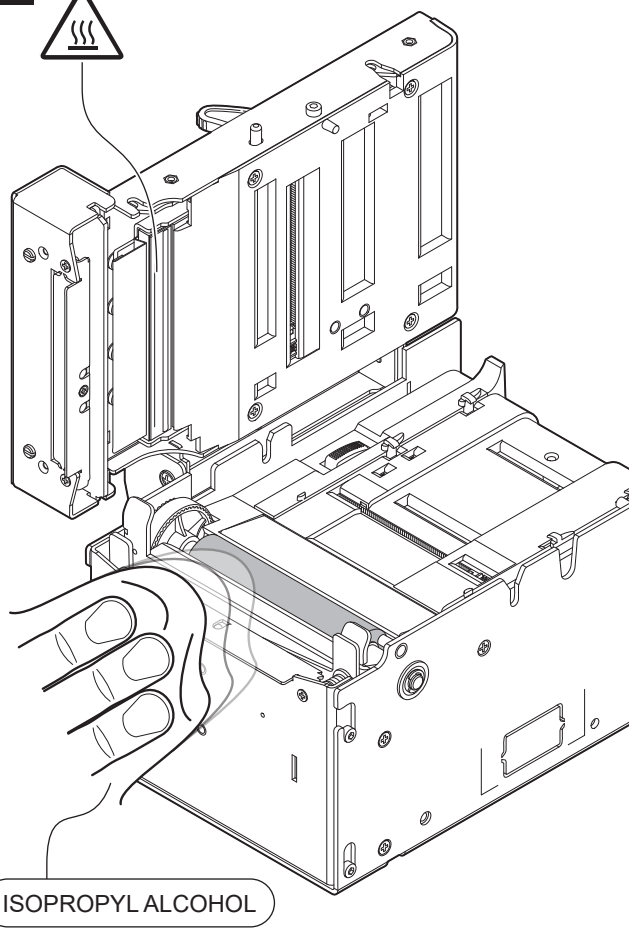
Platen roller

1



Disconnect the power supply cable and open the device covers (see previous paragraphs).

2



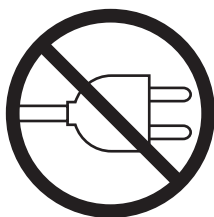
ATTENTION:
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.



Clean the platen roller by using a non-abrasive cloth moistened with isopropyl alcohol.

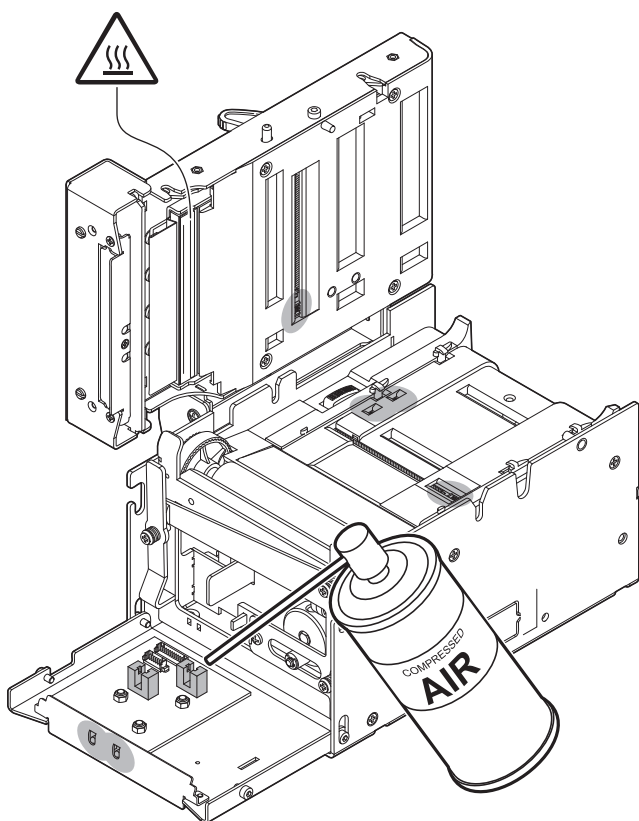
Sensors

1



Disconnect the power supply cable and open the device covers (see previous paragraphs).

2



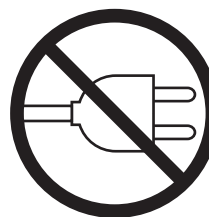
ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.



Clean the device sensors by using compressed air.

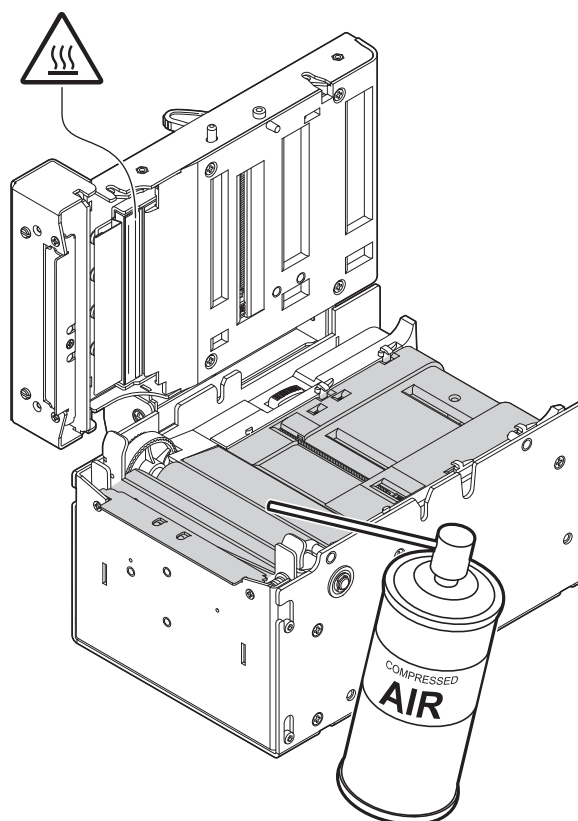
Paper path

1



Disconnect the power supply cable and open the device covers (see previous paragraphs).

2



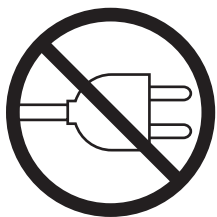
ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.



Clean the area involved in the passage of paper by using compressed air.

Triple feeder

1



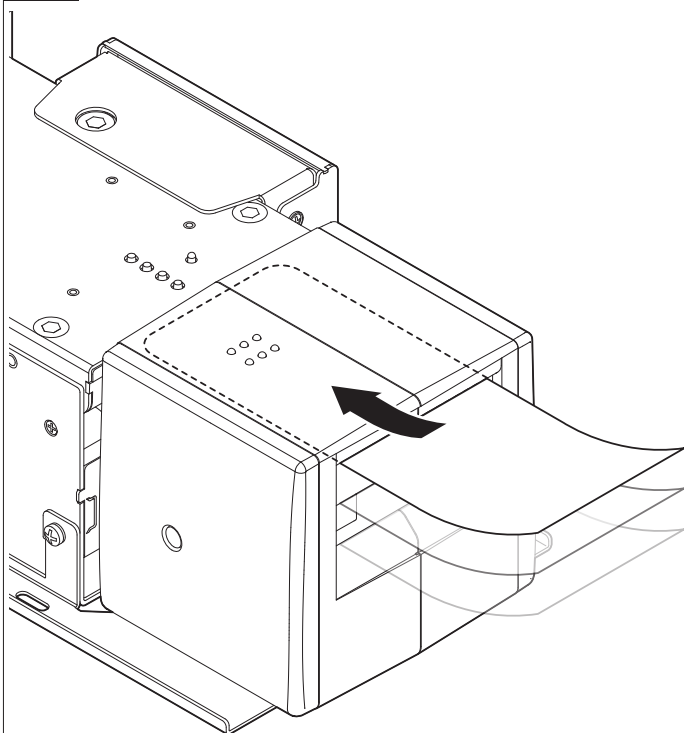
Disconnect the power supply cable and open the device covers (see previous paragraphs).

2

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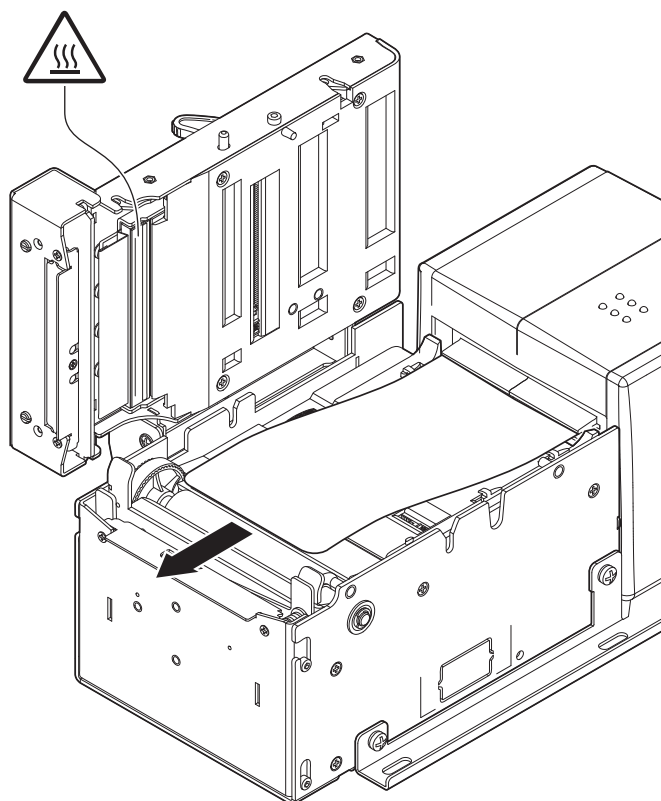
Contact the customer service (see [chapter 12](#)) to request the kit for the triple feeder.

3



Insert the edge with the rounded corners of the ticket of the cleaning kit in each of the three feeders until it comes out from the triple feeder a few of centimeters.

4



ATTENTION:

Do not use alcohol, solvents, or hard brushes.

Do not let water or other liquids get inside the machine.

To remove paper scraps, use tweezers or compressed air.

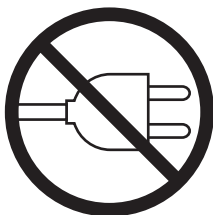


Pull out the ticket of the cleaning kit by sliding it into the triple feeder.

Autocutter

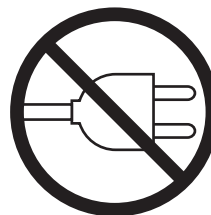
Window for barcode reading

1



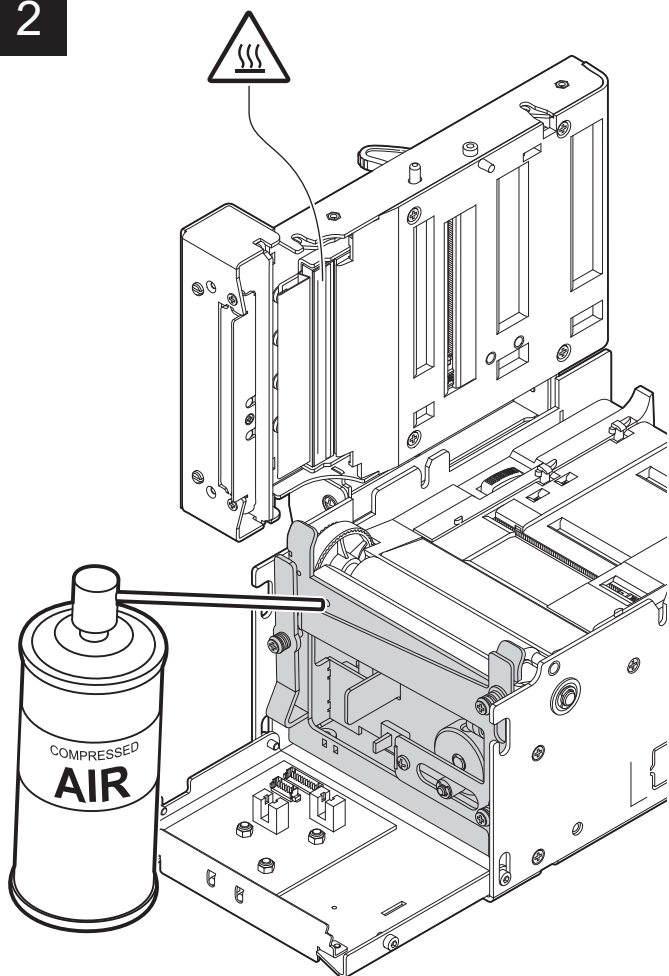
Disconnect the power supply cable and open the device covers (see previous paragraphs).

1



Disconnect the power supply cable and open the device covers (see previous paragraphs).

2

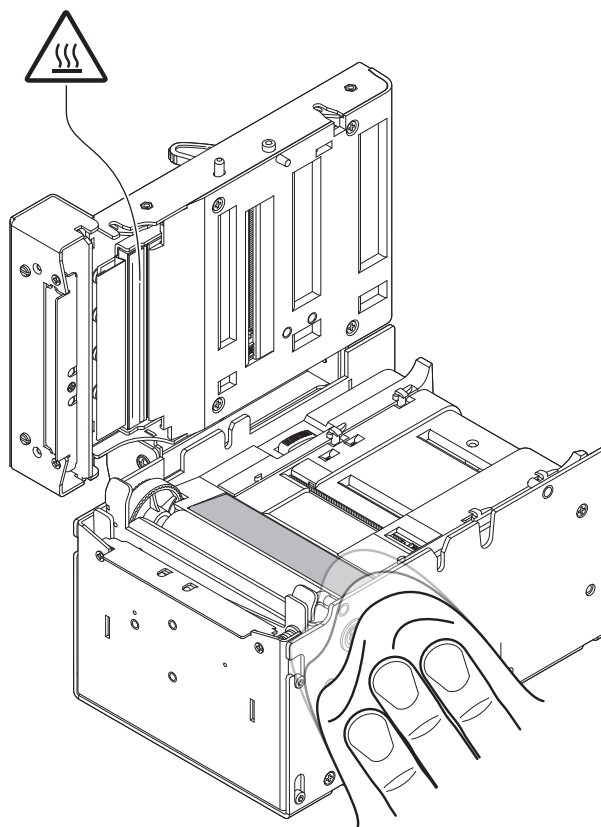


ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.



Clean the autocutter by using compressed air.

2



ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.



Clean the window for barcode reading by using a soft cloth.

8.5 Upgrade firmware

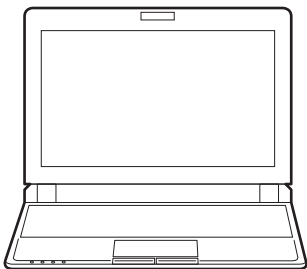
Firmware upgrade can be performed by using the “PrinterSet” software tool available on www.custom4u.it. To upgrade firmware, proceed as follows.

1



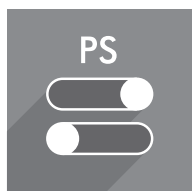
Login to the website www.custom4u.it, type in the product code of the device and download the latest firmware release available.

2



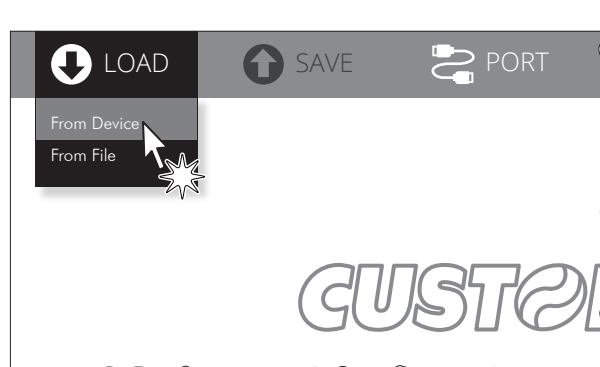
Connect the device to a PC directly (see [paragraph 4.5](#)), without using HUB devices.

3



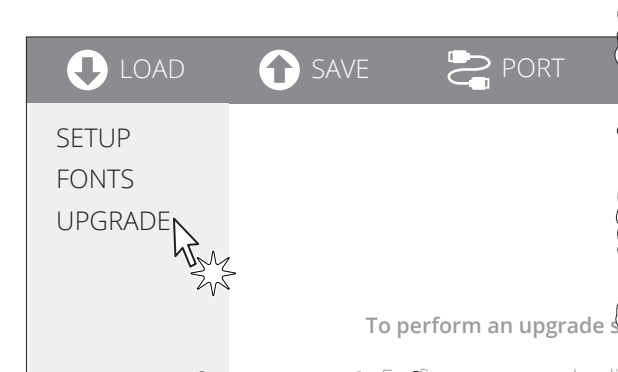
Start the “PrinterSet” software tool.

4



Click on LOAD > FROM DEVICE and select the device connected to the PC.

5



Click on UPGRADE and follow the instructions shown on the screen.

ATTENTION: During saving, it is strongly advised against disconnecting the communication cable or to remove the power supply of PC or device.





9 SPECIFICATION

9.1 Hardware specification

GENERAL	
Sensors	Paper presence, head temperature, paper presence on output, mobile detectors of black mark or translucent gap/hole (setting by software), cutter position, front and upper cover open, external low paper tilting slide position (only for models with selector)
MTBF ⁽¹⁾	84080 hours
Noise	
KPM302III	74 dB
KPM302III TF TK202III	75 dB
TK302III TK302III TF	76.7 dB
Emulations	CUSTOM/POS, SVELTA
INTERFACES	
USB port	480 Mbit/s
RS232 serial port	from 1200 bps to 115200 bps
ETHERNET port (only for models with Ethernet port)	10 Mbit/s, 100 Mbit/s
MEMORIES	
Receive buffer	64 kB
Flash memory	16 MB
Graphic memory	Logos dynamic management (max 2MB graphic memory)
Memory card SD (only for models with SD card)	Capacity = max 2 GB



PRINTER

Resolution	203 dpi (8 dot/mm)
Printing method	Thermal, fixed head
Head life ⁽²⁾	
Abrasion resistance ⁽³⁾	100 Km (with recommended paper)
Pulse durability	100 M (12.5% duty cycle)
Printing mode	Normal, 90°, 180°, 270°
Printing format	Height/Width from 1 to 8, bold, reverse, underlined, italic
Character fonts	
CUSTOM/POS emulation	54 character code pages (see paragraph 9.12) 2 TrueType font ⁽⁴⁾ , extended chinese GB18030-2000
SVELTA emulation	20 embedded fonts, 2 TrueType font ⁽⁴⁾
Printable barcode	UPCA, UPCE, EAN13, EAN8, CODE39, ITF, CODABAR, CODE93, CODE128, CODE32, PDF417, DATAMATRIX, AZTEC, QRCODE
Printing speed ^{(2) (5)}	High quality = 110 mm/s Normal = 170 mm/s High speed = 200 mm/s

PAPER

Type of paper	Thermal rolls, heat-sensitive side on outside of roll Thermal fan-fold module with alignment black mark
Paper width	
KPM302III TK202III TK302III	from 20 mm to 82.5 mm (2 mm step)
KPM302III EJ KPM302III vSEL KPM302III hSEL	from 40 mm to 82.5 mm (2 mm step)



KPM302III TF KPM302III TF-EJ KPM302III TF-hSEL TK302III TF	54 mm, 60 mm, 82.5 mm
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models with CUT&HOLD kit (optional)	from 40 mm to 82.5 mm (2 mm step)
-------------------------------------	-----------------------------------

Paper weight

modelli seguenti in configurazione standard: KPM302III KPM302III EJ KPM302III vSEL KPM302III hSEL TK202III TK302III	from 80 g/m ² to 255 g/m ²
--	--

following models in BURSTER configuration: KPM302III KPM302III EJ KPM302III vSEL KPM302III hSEL TK302III	from 100 g/m ² to 250 g/m ²
--	---

following models in standard configuration: KPM302III TF KPM302III TF-EJ KPM302III TF-hSEL TK302III TF	from 100 g/m ² to 255 g/m ²
---	---

following models in BURSTER configuration: KPM302III TF KPM302III TF-EJ KPM302III TF-hSEL TK302III TF	from 100 g/m ² to 250 g/m ²
--	---

Paper thickness

KPM302III TF KPM302III TF-EJ KPM302III TF-hSEL TK302III TF	max 280 µm
---	------------

Minimum ticket length

KPM302III vSEL KPM302III hSEL KPM302III TF-hSEL	50 mm
---	-------

External roll diameter ⁽⁶⁾

	max. 300 mm
--	-------------

Internal roll core diameter

	25 mm (+ 1mm)
--	---------------



Core thickness	2 mm (+1 mm)
----------------	--------------

Core type	Cardboard or plastic
-----------	----------------------

Paper end	Not attached to roll core
-----------	---------------------------

AUTOCUTTER (only for models with autocutter)

Paper cut	Total cut
-----------	-----------

Estimated life ⁽²⁾	1500000 cuts
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TRANSPONDER SPECIFICATIONS (only for models with RFID reader/writer)

Supported transponders

UHF ultra high frequency RFID (for models with UHF reader/writer)	UHF EPC Gen2
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HF High Frequency CUSTOM RFID (for models with HF reader/writer)	Mifare UltraLight, Mifare Classic 1K/4K Mifare EV1, Mifare UltraLight C, Mifare UltraLight C + SAM, Mifare DESFire + SAM, Mifare Plus Calypso Tag*, Sri – Srx – Srt iCode, iCode Texas Instruments
---	--

BARCODE READER mod.CM003 (only for models with barcode reader)

Scan rate	200 scans/s
-----------	-------------

Sensor	Liner CCD image sensor
--------	------------------------

Light source	Red LED lamp, 630 nm
--------------	----------------------

Ambient light (Fluorescent lamp)	3000 LUX max
----------------------------------	--------------

Resolution	4 mil
------------	-------

Readable barcode	EAN-8, EAN-13, UPC-A, UPC-E, EAN/UPC Add-on, Code 39, Code 32, UCC/EAN/Code 128, Industrial 25, Interleave 25, Matrix 25, Codabar/Nw7, MSI/Plessey RSS (GS1 Databar)
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DEVICES ELECTRICAL SPECIFICATIONS

Power supply	24 Vdc ±10%
--------------	-------------

Medium consumption ⁽⁷⁾	4.10 A
-----------------------------------	--------



Typical consumption ⁽⁵⁾

KPM302III
KPM302III EJ
KPM302III vSEL
KPM302III hSEL
TK202III
TK302III

0.8 A

KPM302III TF
KPM302III TF-EJ
KPM302III TF-hSEL
TK302III TF

1 A

Standby consumption 0.14 A

POWER SUPPLY ELECTRICAL SPECIFICATIONS code 963GE020000112
(OPTIONAL for KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL,
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL;
INCLUDED with TK202III, TK302III, TK302III TF)

Power supply voltage Auto Range, 90-132 VAC & 190-264 VAC

Frequency from 47 Hz to 63 Hz

Output 24V, 4.17 A

Power 100 W

ENVIRONMENTAL CONDITIONS

Operating temperature

following models with
Real Time Clock:
KPM302III
KPM302III EJ
KPM302III vSEL
KPM302III hSEL
KPM302III TF
KPM302III TF-EJ
KPM302III TF-hSEL

from 0 °C to +50 °C ⁽⁶⁾

following models without
Real Time Clock:
KPM302III
KPM302III EJ
KPM302III vSEL
KPM302III hSEL
KPM302III TF
KPM302III TF-EJ
KPM302III TF-hSEL

from -20 °C to +70 °C ⁽⁶⁾



TK202III
TK302III
TK302III TF

from 0 °C to +40 °C

Relative humidity (RH)

KPM302III
KPM302III EJ
KPM302III vSEL
KPM302III hSEL
KPM302III TF
KPM302III TF-EJ
KPM302III TF-hSEL

from 10% to 80% (w/o condensation)

TK202III
TK302III
TK302III TF

from 10% to 85% (w/o condensation)

Storage temperature

from -20 °C to +70 °C

Storage relative humidity (RH)

from 10% to 90% (w/o condensation)

NOTES:

- (1) : Control board.
- (2) : Respecting the regular schedule of cleaning for the device components.
- (3) : Damages caused by scratches, ESD and electromigration are excluded.
- (4) : "Veramono.ttf" and "Vera.ttf" are installed on the device. It is possible to install additional TrueType fonts by using the "PrinterSet" software tool available on www.custom4u.it.
- (5) : Referred to a standard CUSTOM receipt (L=10 cm, Density = 12,5% dots on).
- (6) : For external rolls diameter higher to Ø100 mm it's recommended to use a paper pretensioning device.
- (7) : Referred to the UL measurements (Speed/Quality = Normal, ticket length = 203 mm, 50% dots on, loop = 10 s).
- (8) : If you use the device with the power supply code 963GE020000112, supplied as an accessory, the operating temperature range is from 0 °C to +40 °C.



9.2 Character specifications

Character set		3	
Character density	11 cpi	15 cpi	20 cpi
Number of columns	35	45	64
Chars / second	2900	3800	5300
Lines / second	83	83	83
Characters (L x H mm)-Normal	2.25 x 3	1.75 x 3	1.25 x 3

NOTE: Theoretical values.



9.3 Device dimensions

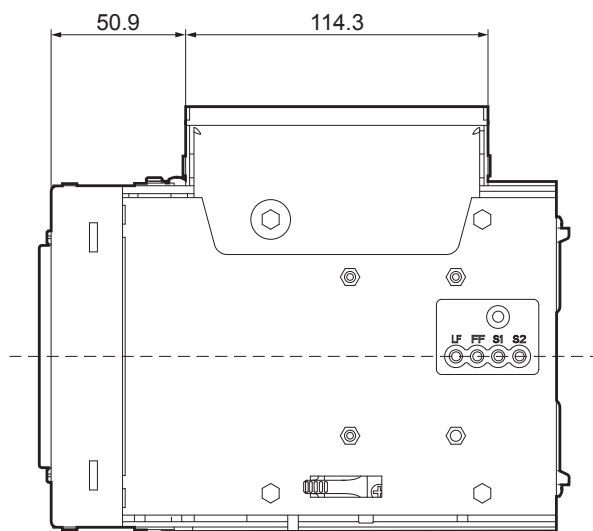
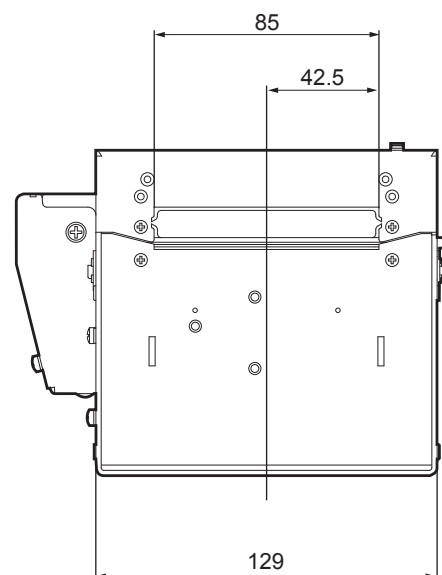
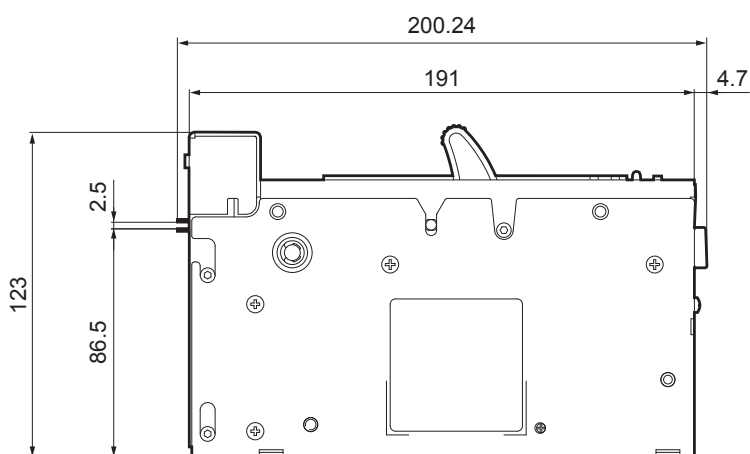
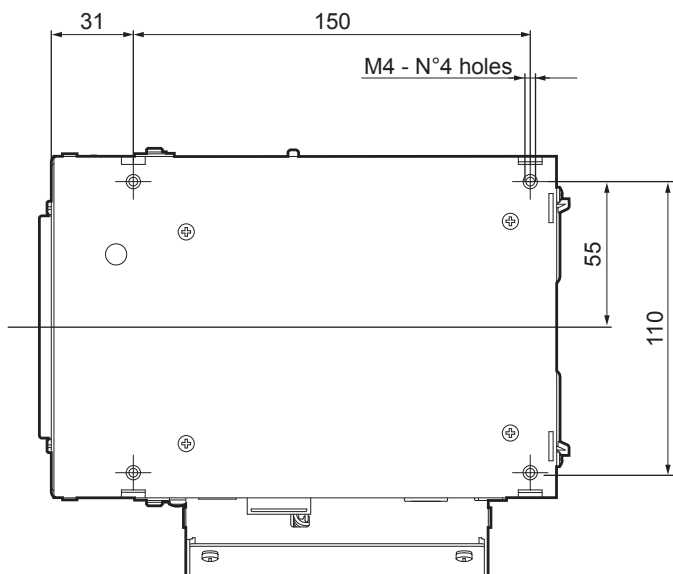
All the dimensions shown in the following figure are in millimetres and referred to devices with covers closed and without paper roll.

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL

Length	
KPM302III	191 mm
KPM302III EJ	212.7 mm
KPM302III vSEL KPM302III hSEL	272.2 mm
Height	123 mm
Width	160 mm
Weight	3500 g

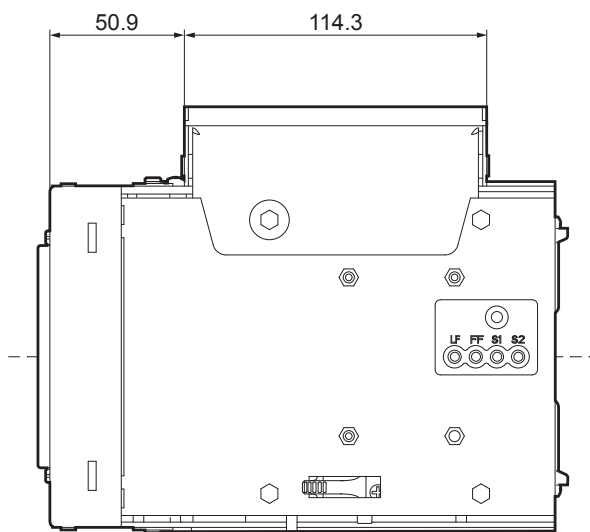
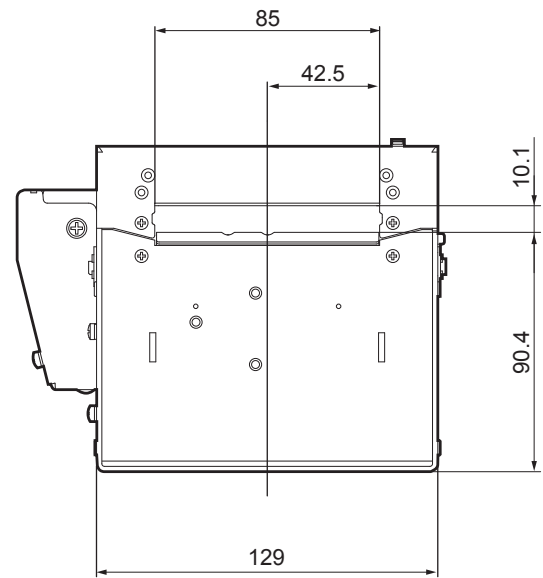
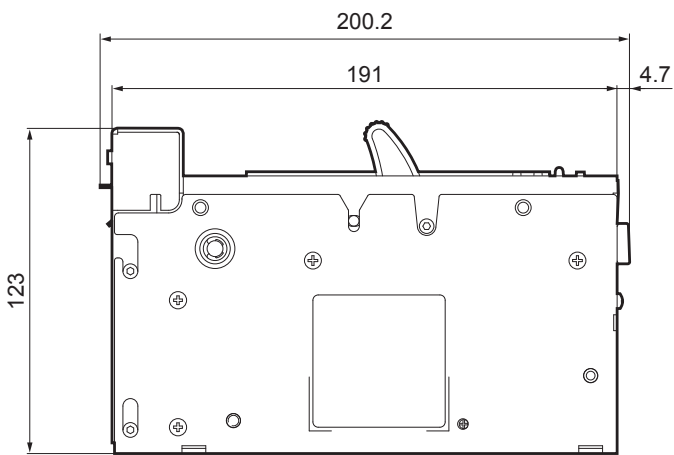
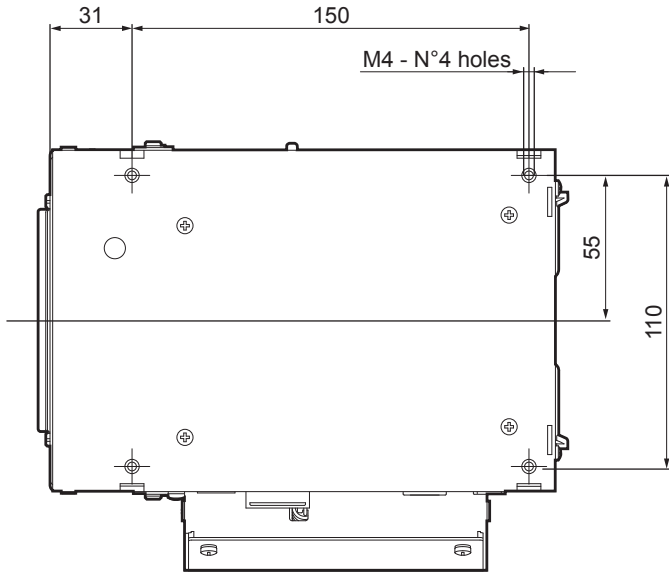


KPM302III (standard configuration)



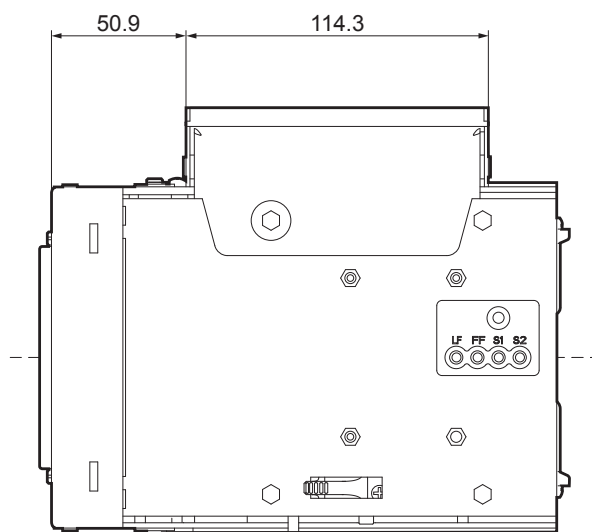
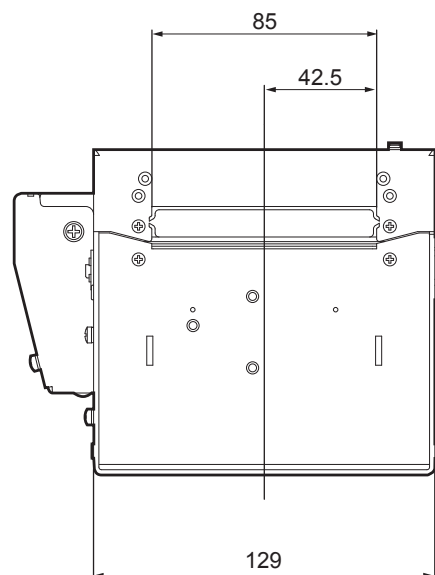
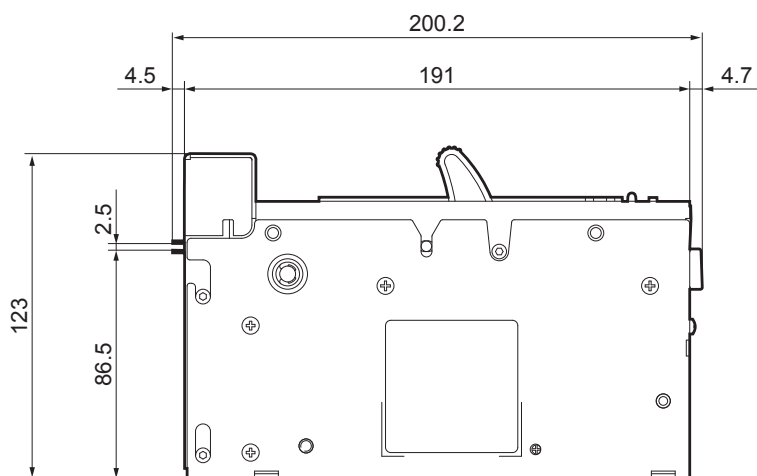
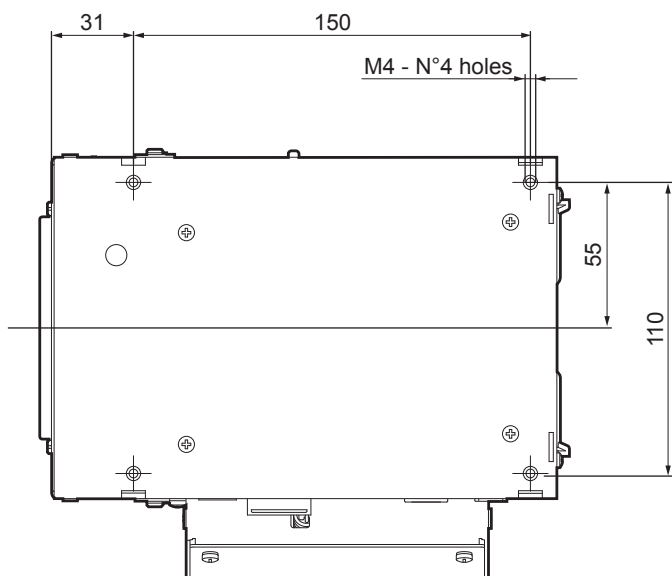


KPM302III (CUT&DROP configuration)



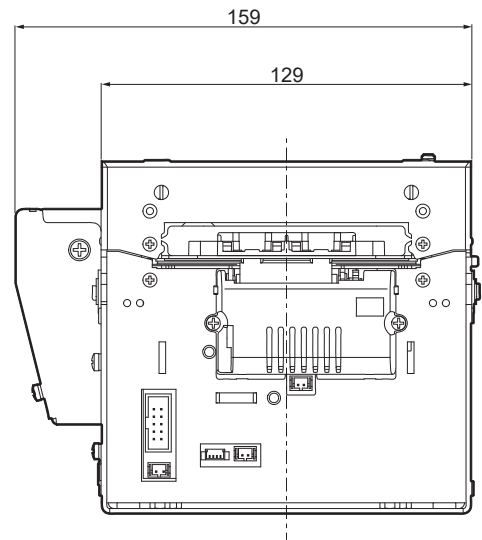
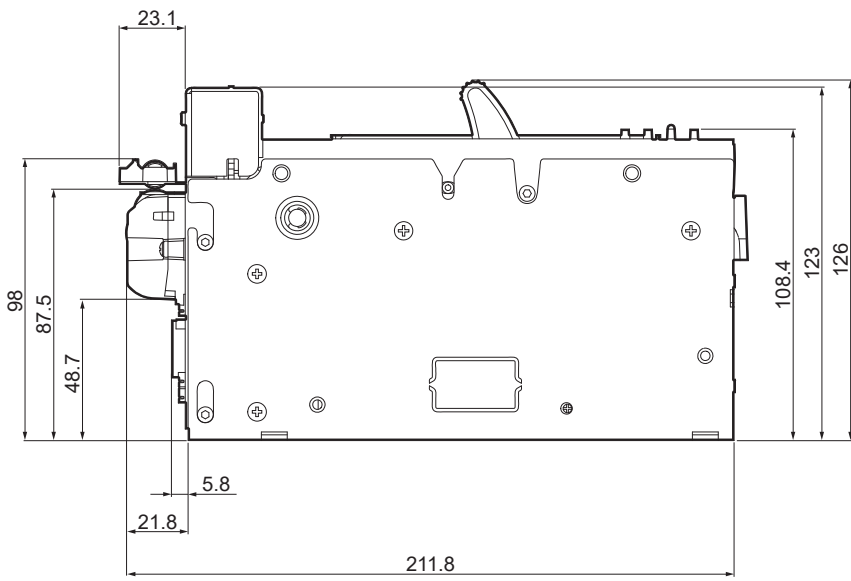
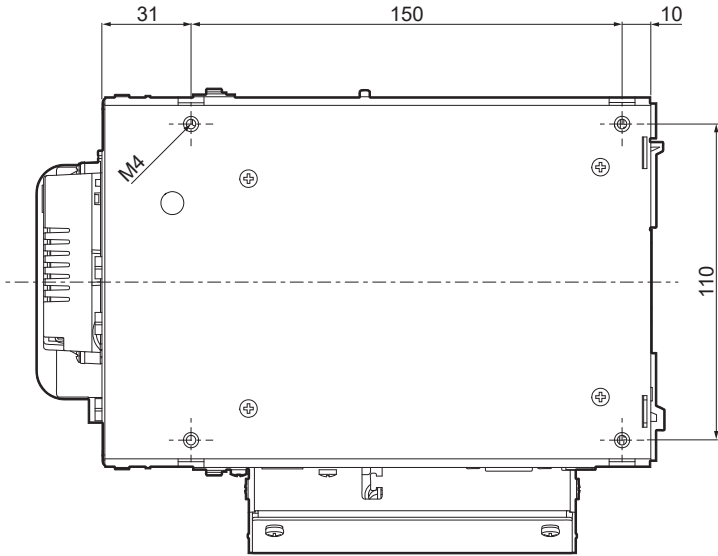


KPM302III (BURSTER configuration)



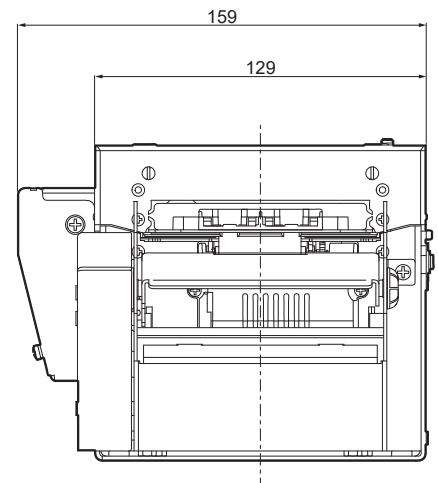
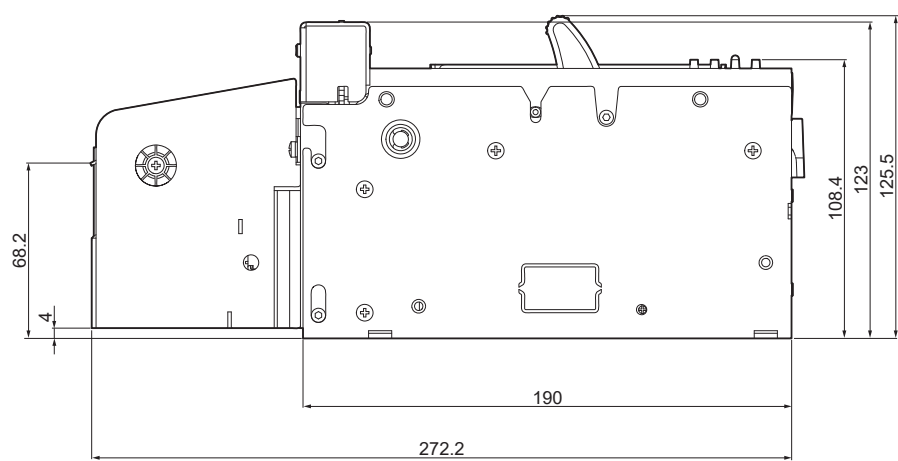
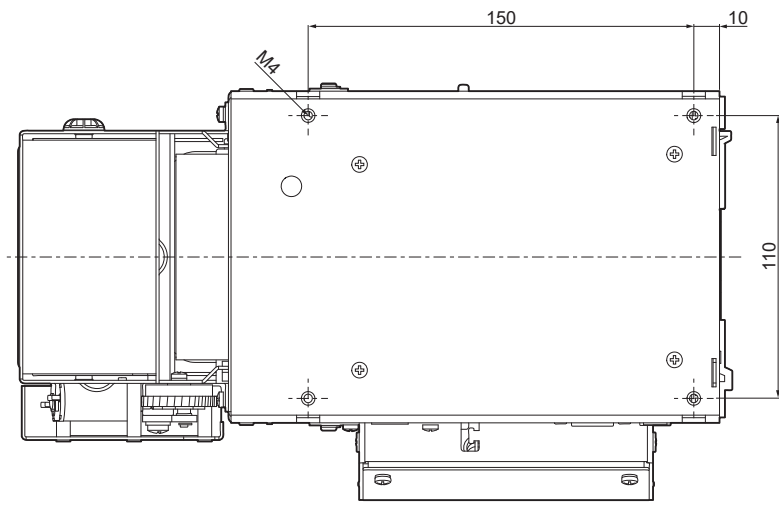


KPM302III EJ



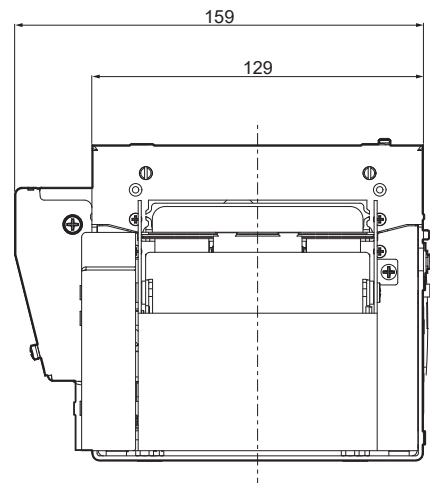
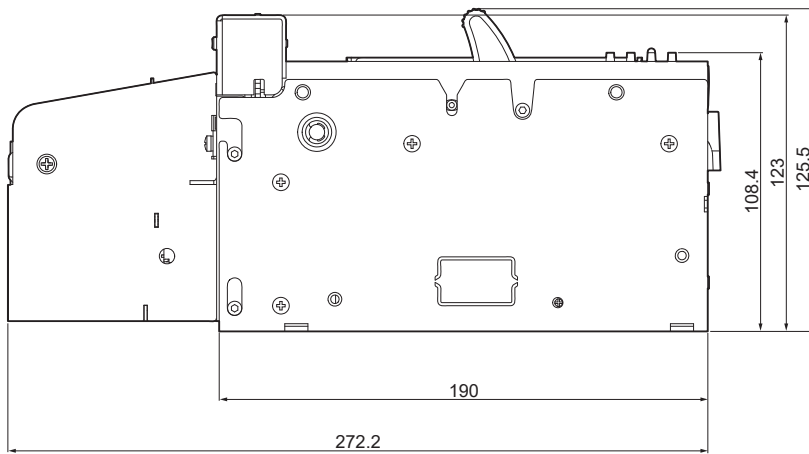
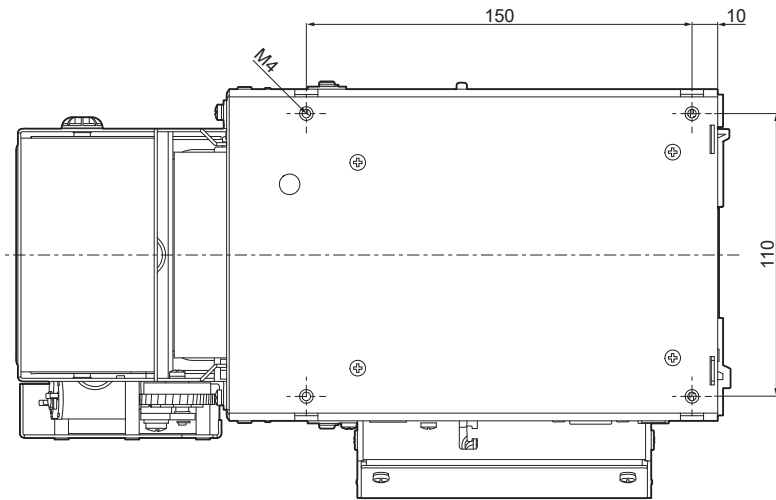


KPM302III vSEL





KPM302III hSEL



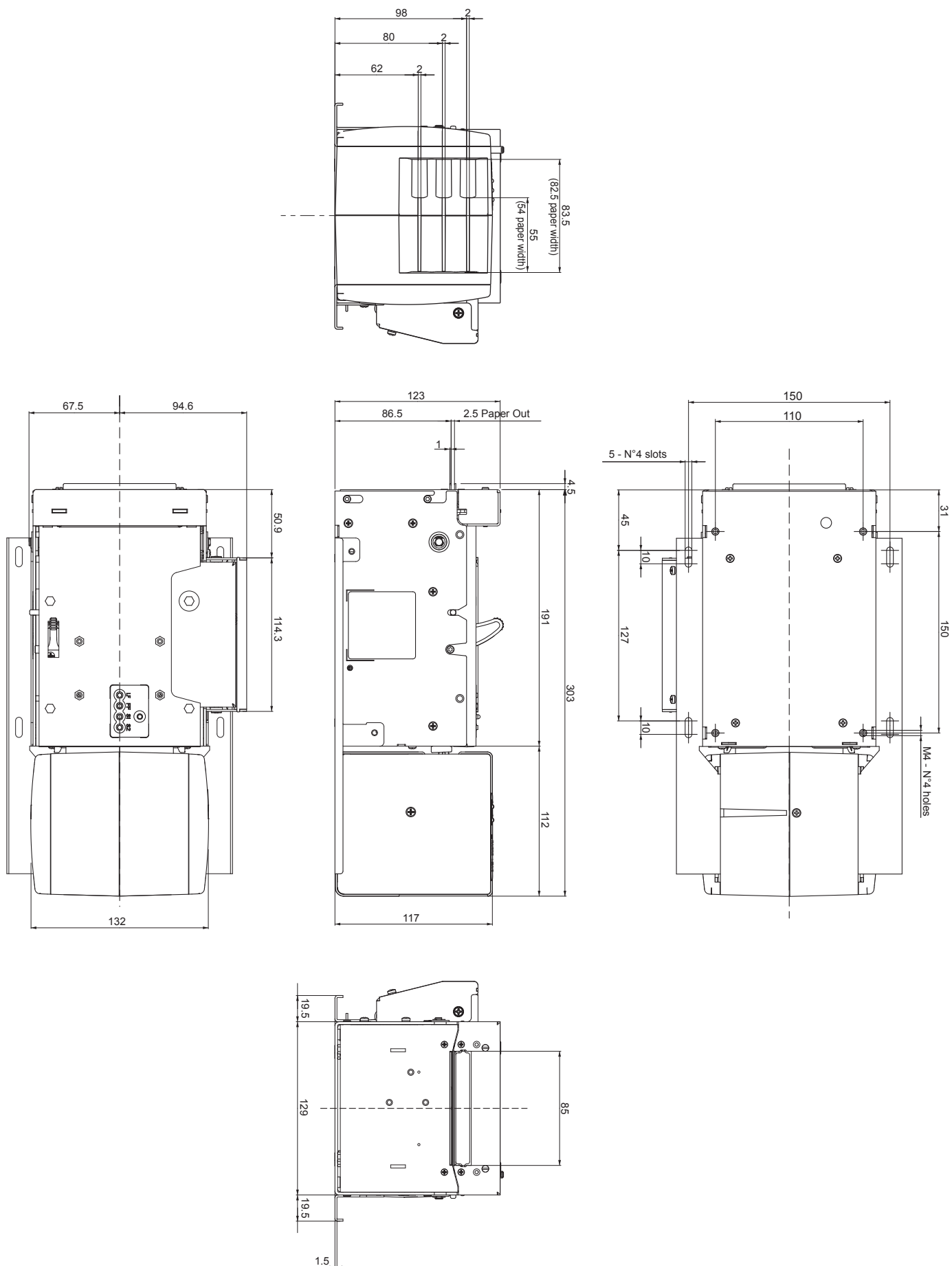


KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL

Length	
KPM302III TF	307.5 mm
KPM302III TF-EJ	327 mm
KPM302III TF-hSEL	385.2 mm
Height	123 mm
Width	168 mm
Weight	5200 g

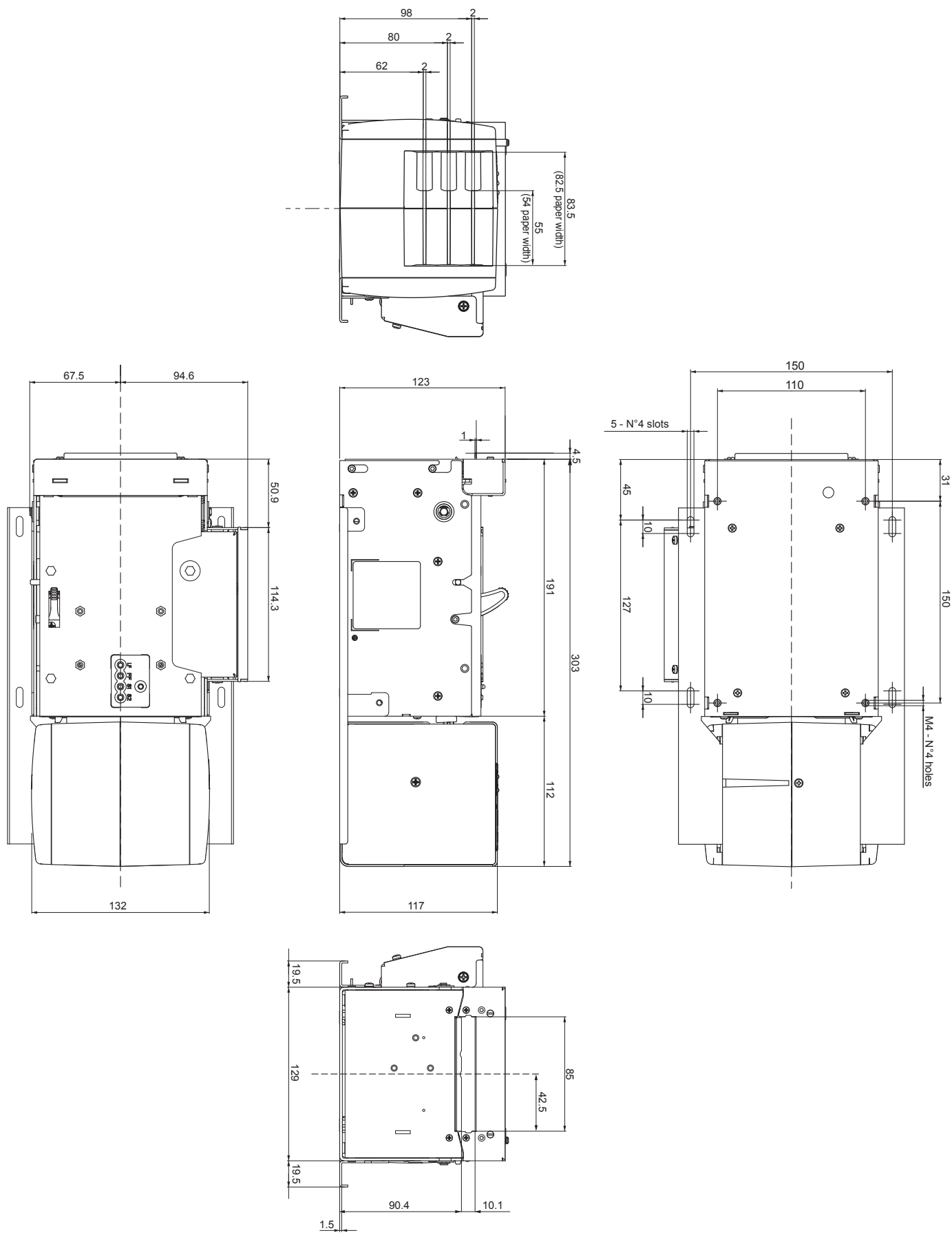


KPM302III TF (standard configuration)



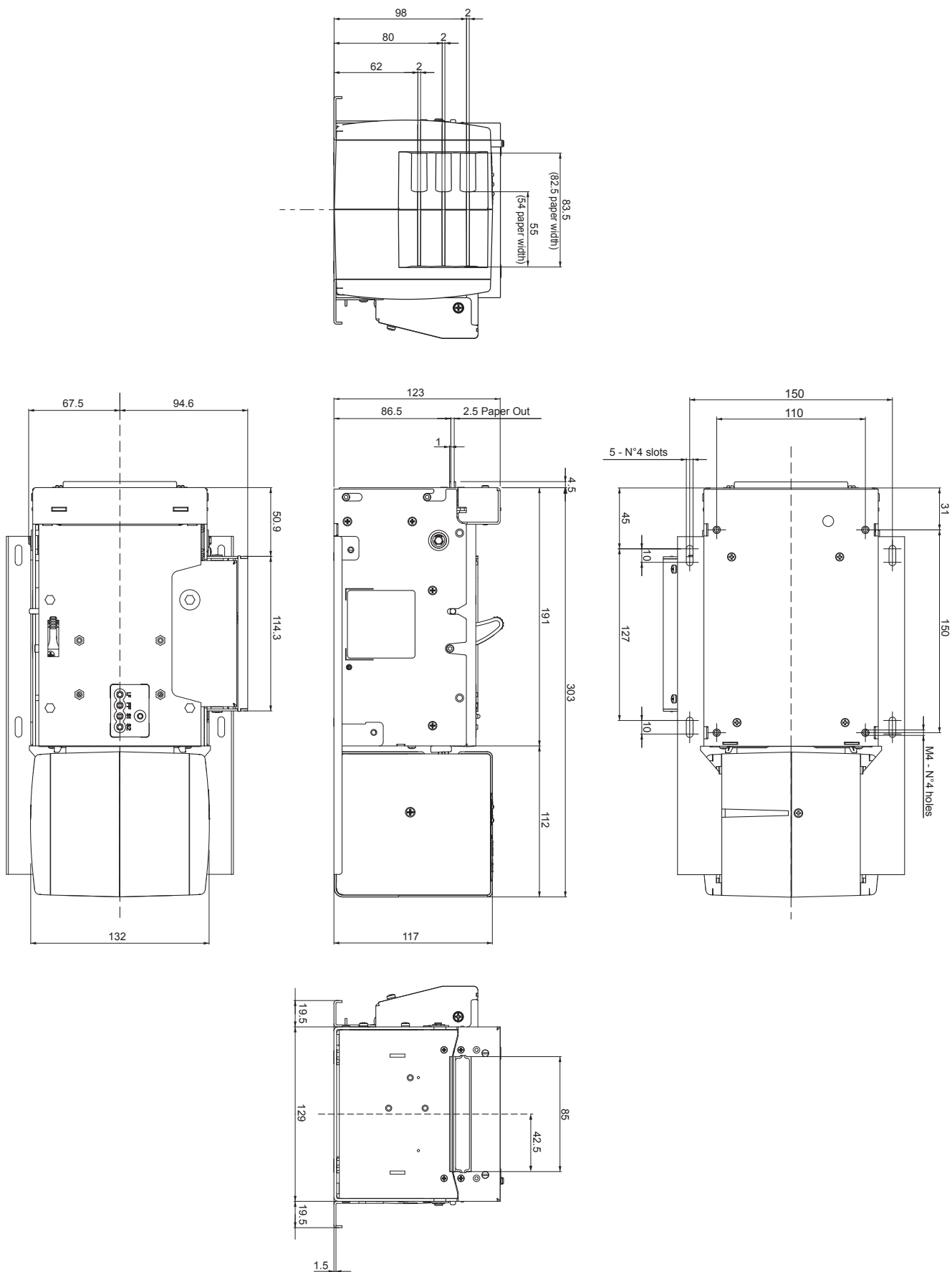


KPM302III TF (CUT&DROP configuration)



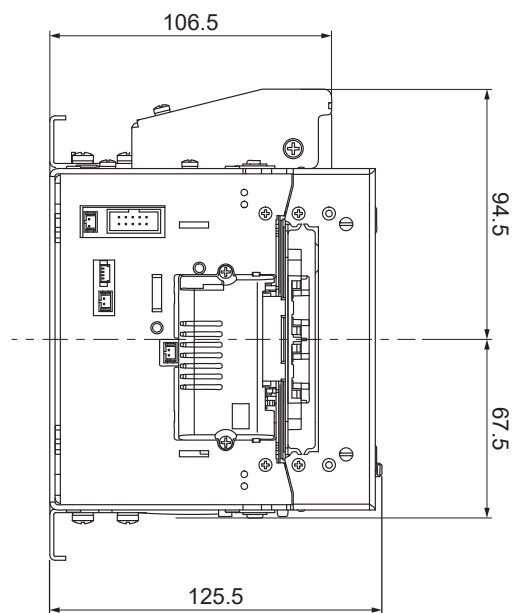
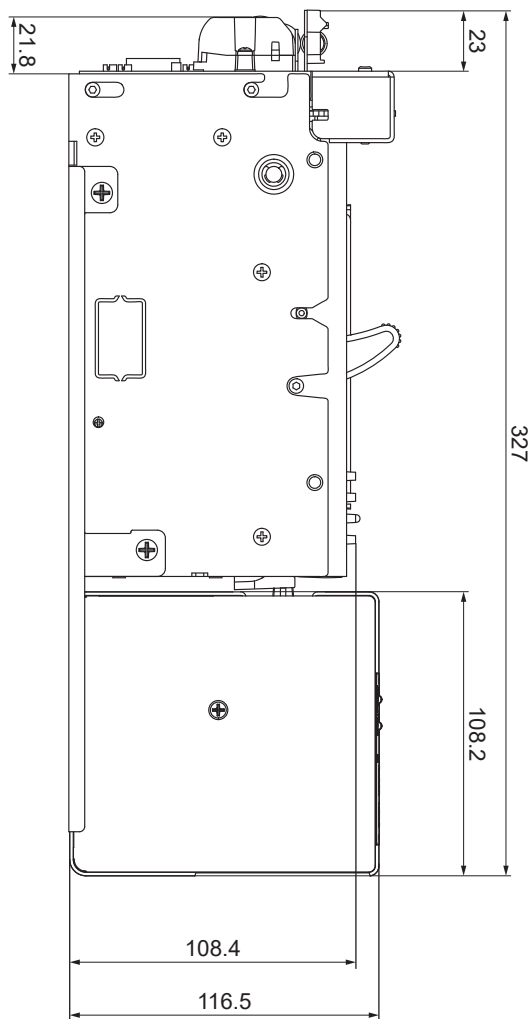
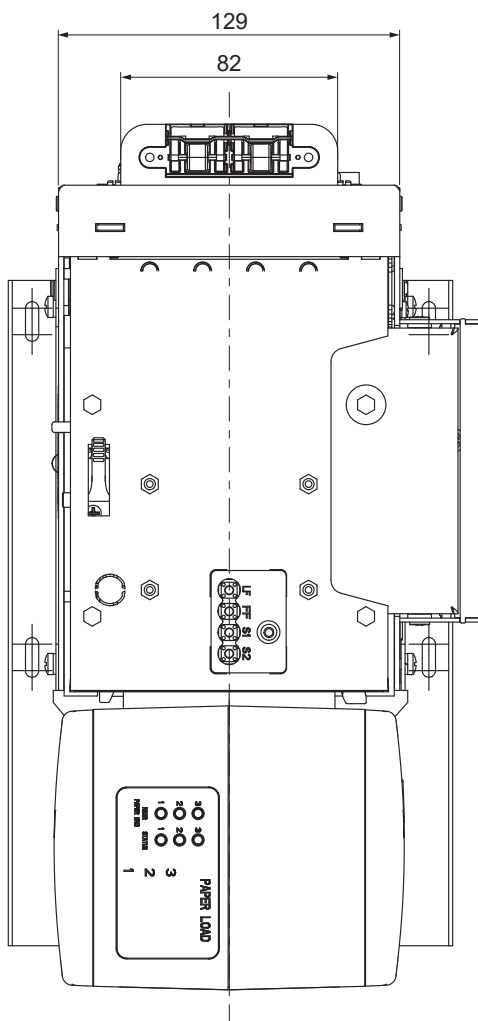


KPM302III TF (BURSTER configuration)



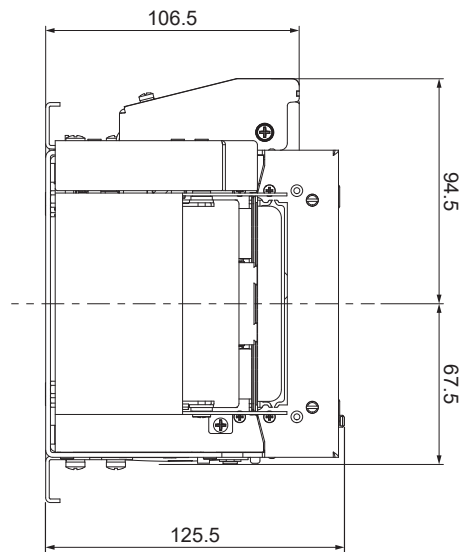
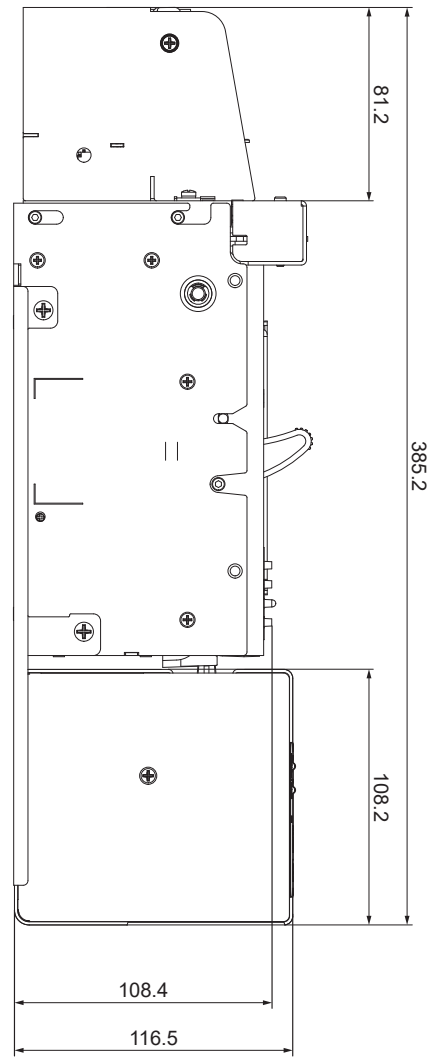
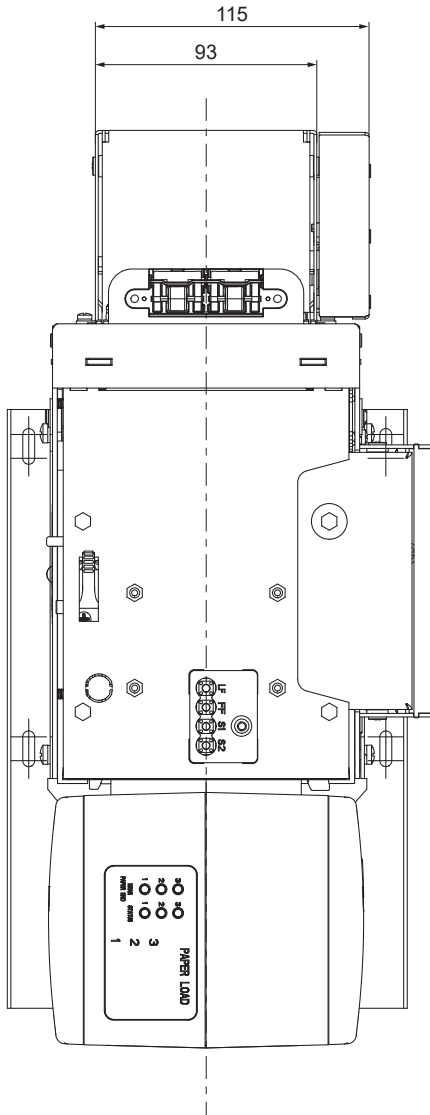


KPM302III TF-EJ





KPM302III TF-hSEL





TK302III, TK302III TF

Length

TK202III TK302III	252.1 mm
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TK302III TF	331 mm
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Height 192.6 mm

Width 216 mm

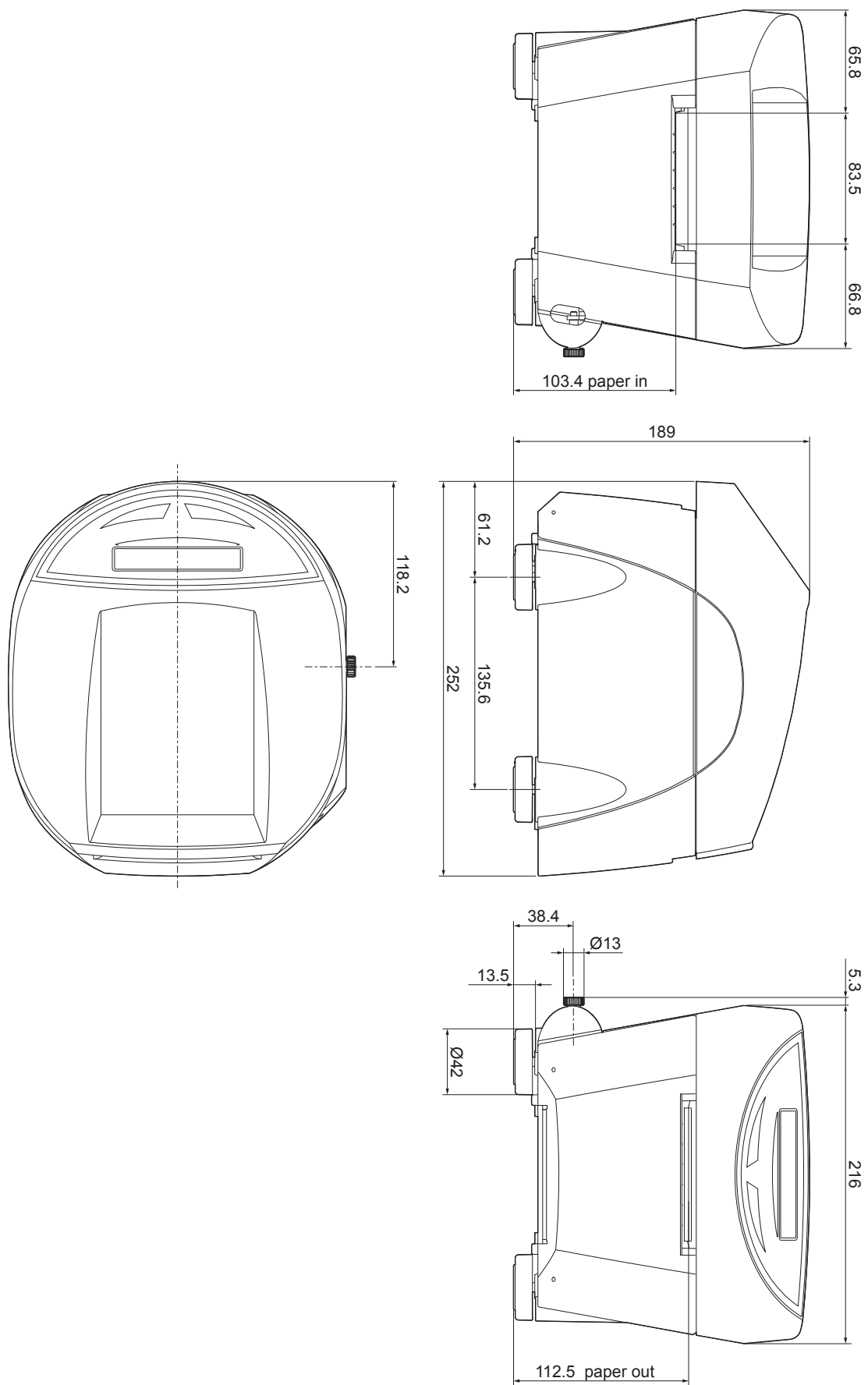
Weight

TK202III TK302III	4000 g
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TK302III TF	4950 g
-------------	--------

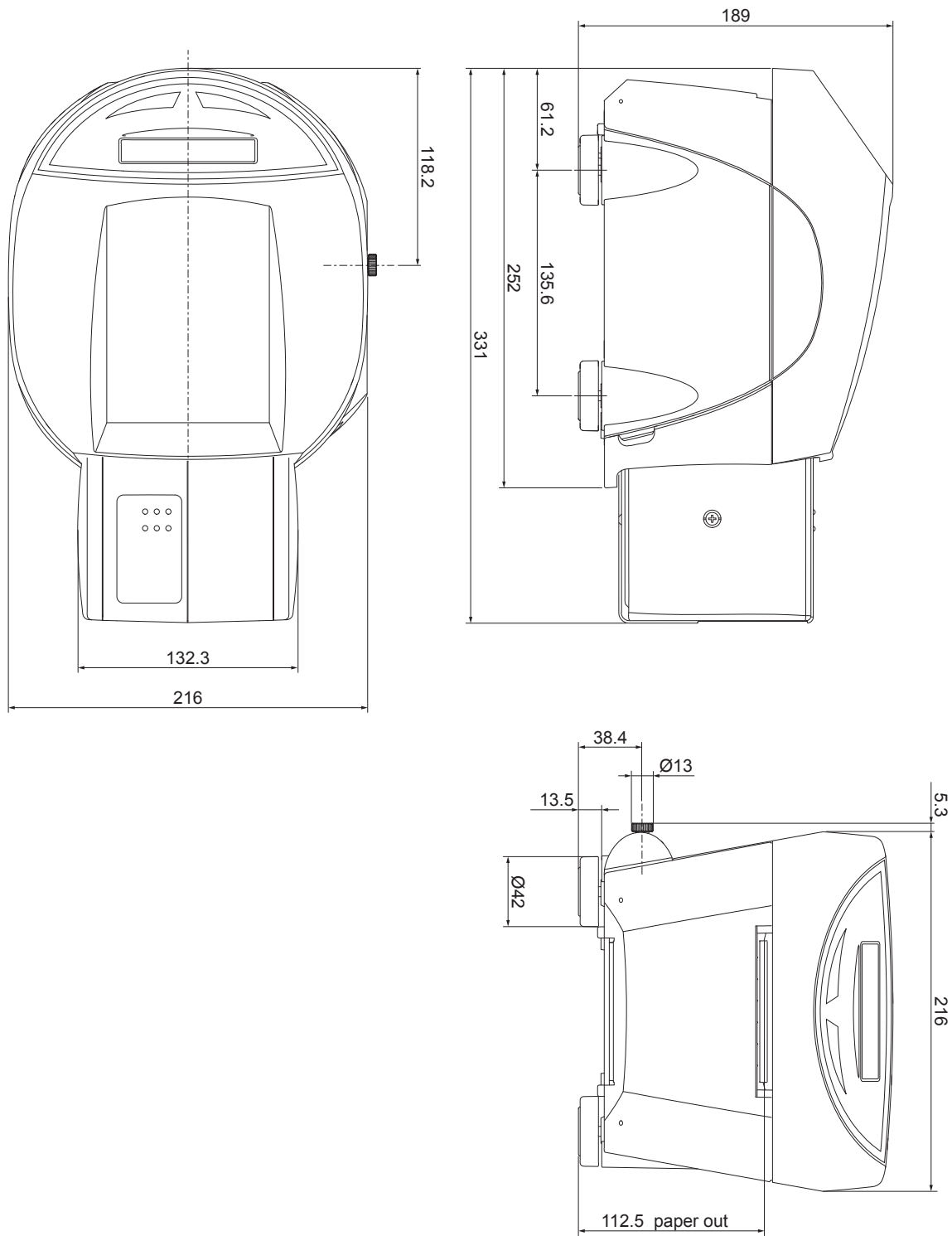


TK202III, TK302III





TK302III TF



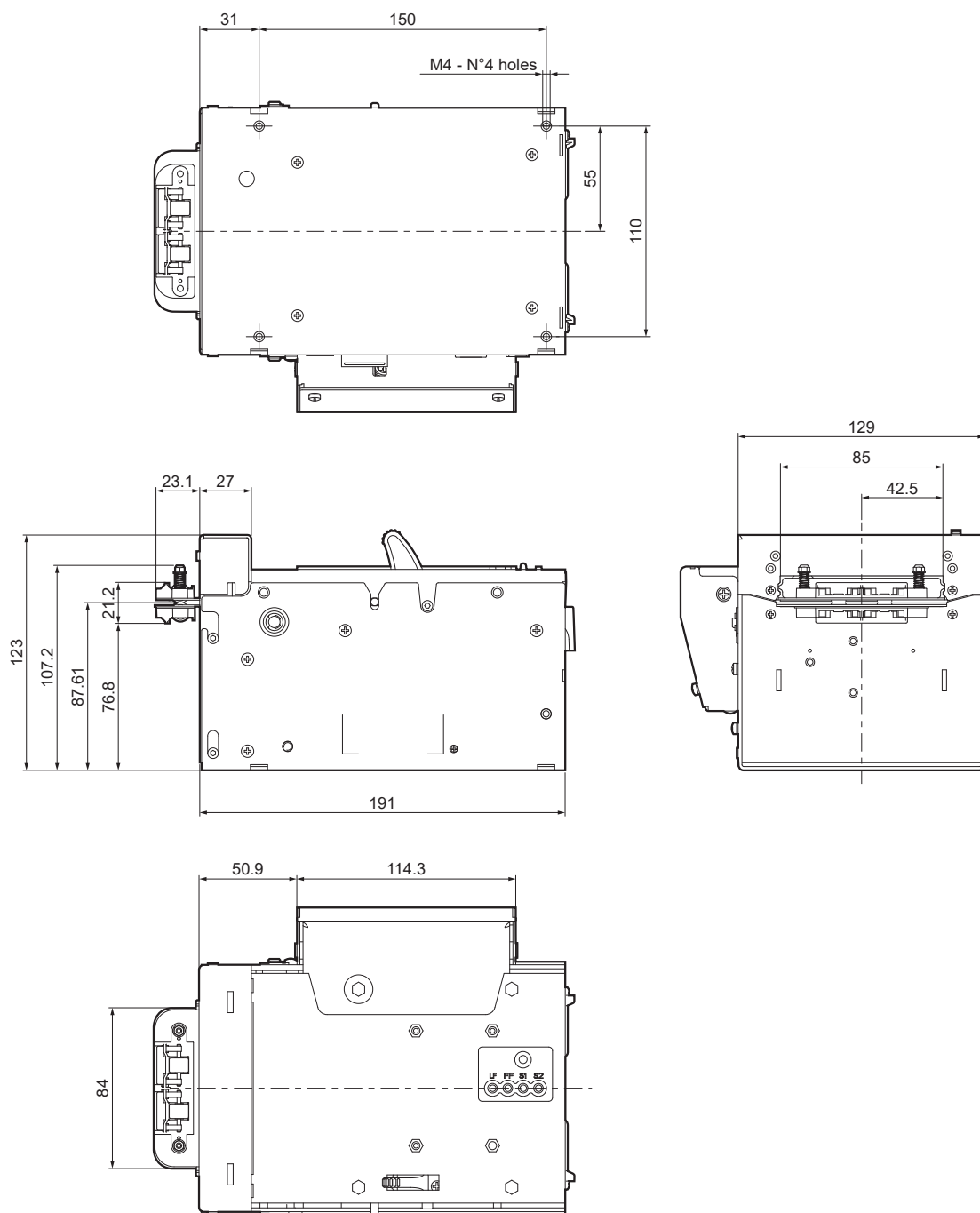


9.4 Device dimensions with CUT&HOLD kit code 976AV01000002 (optional)

All the dimensions shown in the following figure are in millimetres and referred to devices with covers closed.

KPM302III

Length	214.1 mm
Height	123 mm
Width	160 mm



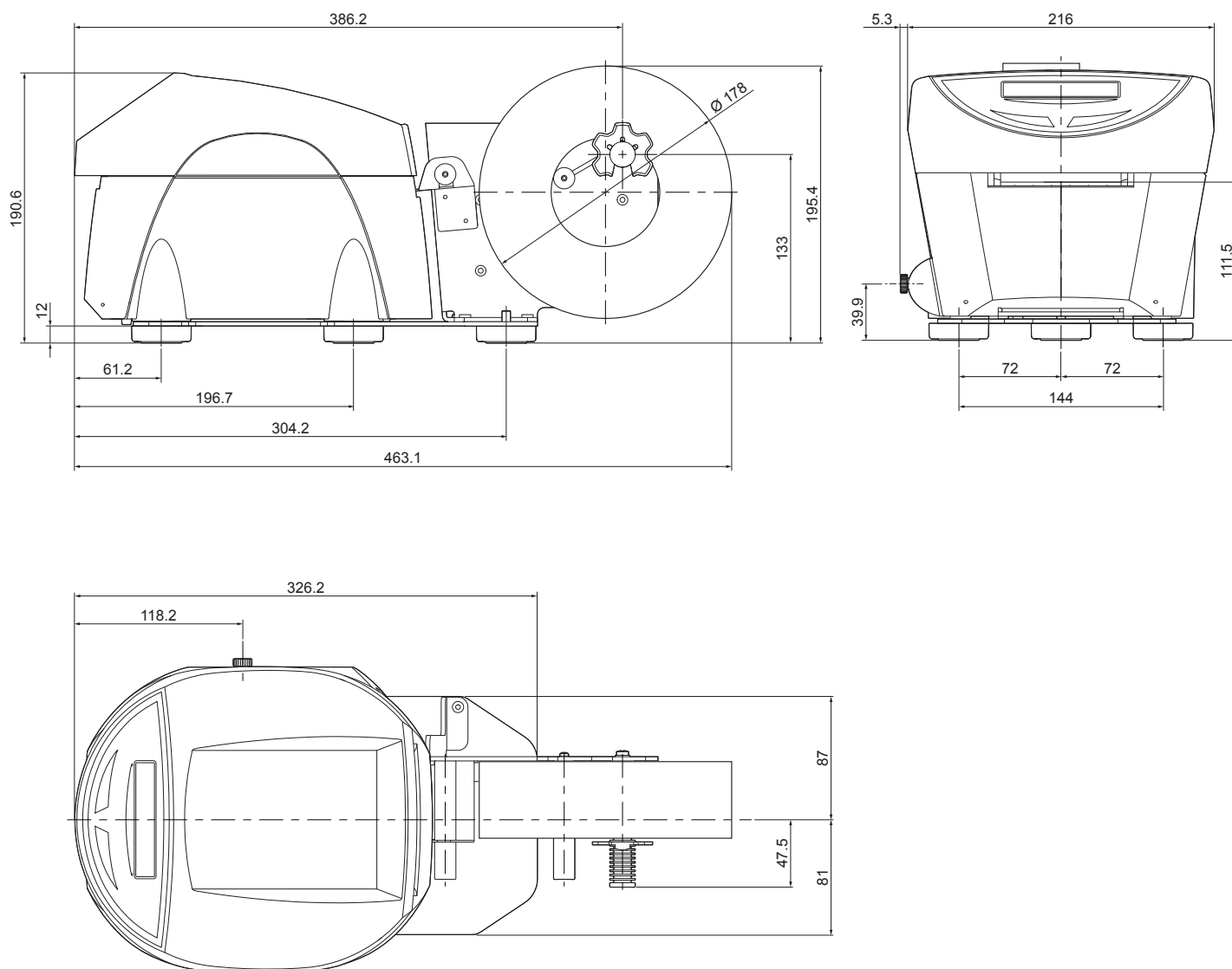


9.5 Device dimensions with paper roll holder code 974BA01000001 (optional)

All the dimensions shown in the following figure are in millimetres and referred to devices with covers closed and with $\varnothing 178$ mm paper roll.

TK202III, TK302III

Length	463.1 mm
Height	195.4 mm
Width	216 mm





9.6 Device dimensions with height reduction kit code 976BB010000014 (optional)

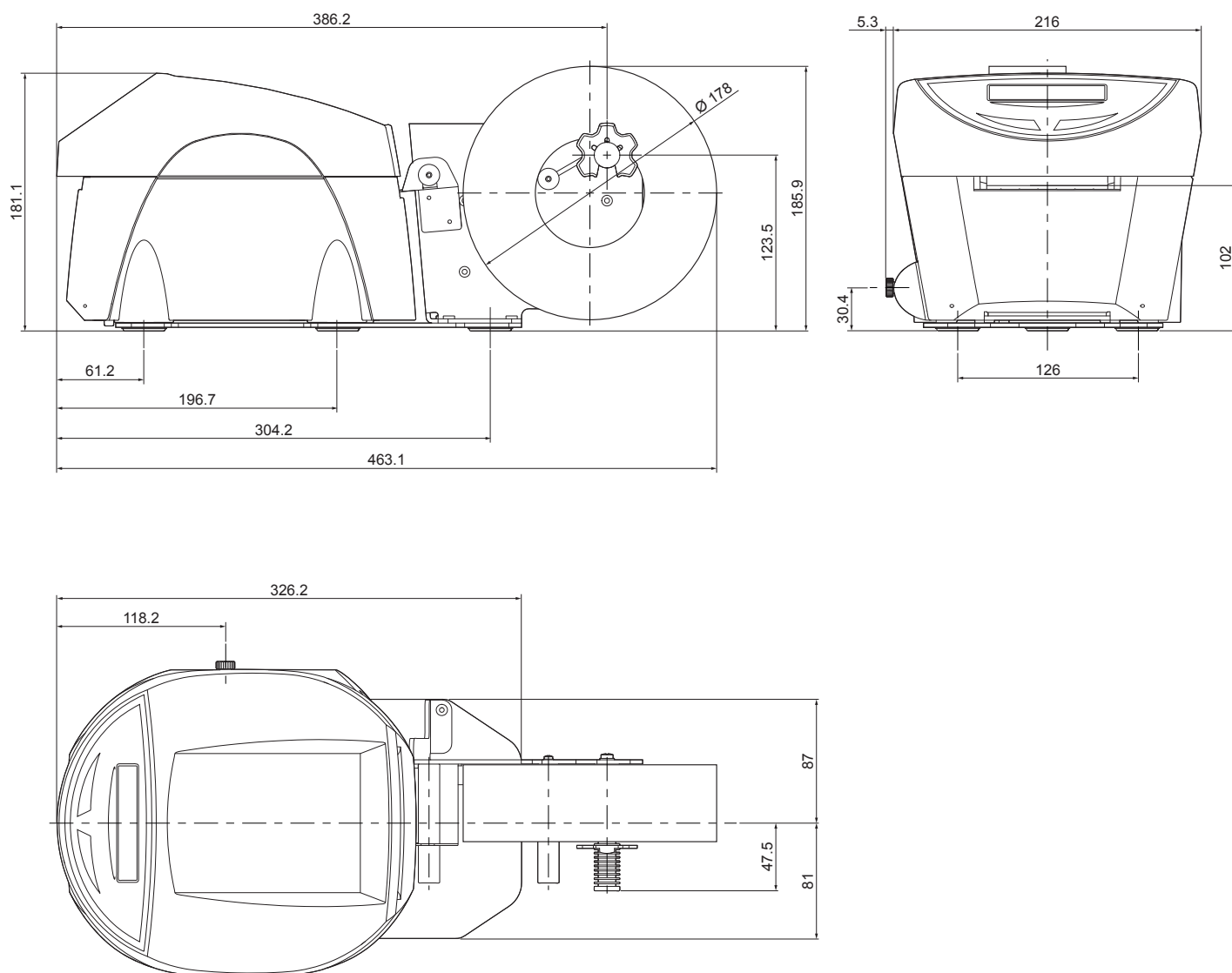
All the dimensions shown in the following figure are in millimetres and referred to devices with covers closed and with $\varnothing 178$ mm paper roll.

models with paper roll holder (code 974BA010000001 - optional)

Length 463.1 mm

Height 185.9 mm

Width 216 mm



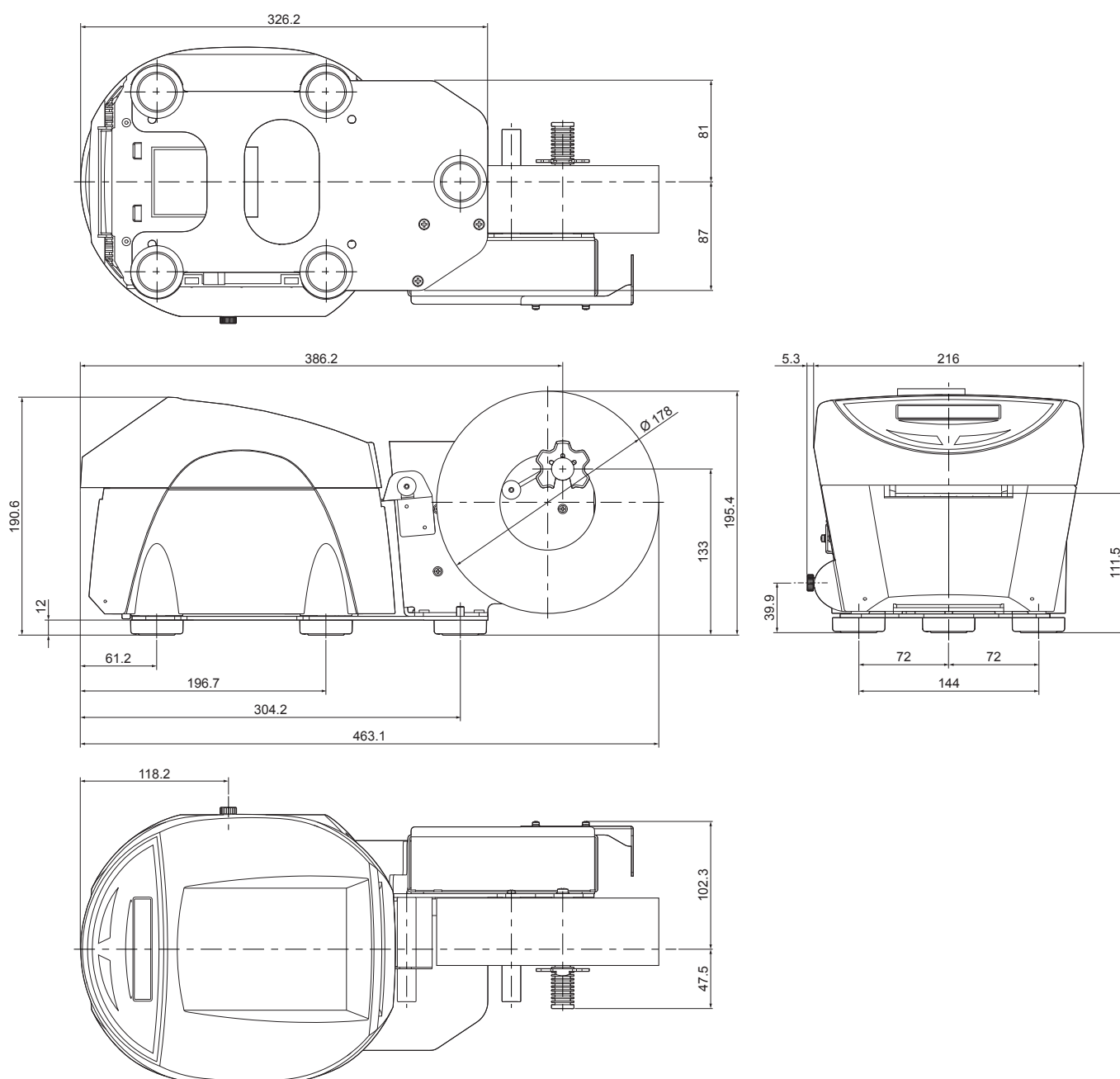


9.7 Device dimensions with power supply container code 974BB01000001 (optional)

All the dimensions shown in the following figure are in millimetres and referred to devices with covers closed and with $\varnothing 178$ mm paper roll.

models with paper roll holder (code 974BA01000001 - optional)

Length	463.1 mm
Height	195.4 mm
Width	216 mm



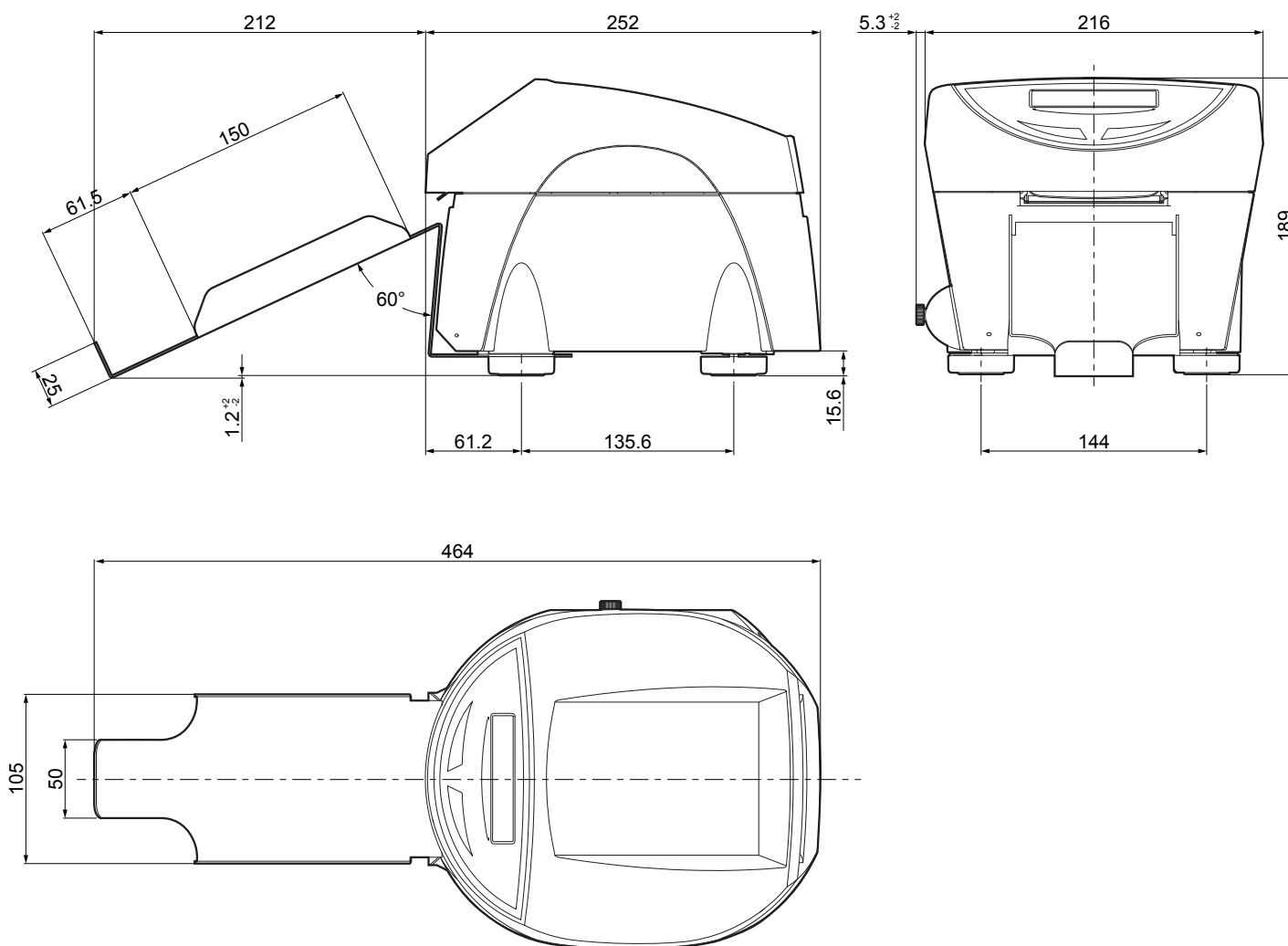


9.8 Device dimensions with metallic ticket tray code 976BB01000003 (optional)

All the dimensions shown in the following figure are in millimetres and referred to devices with covers closed

TK302III, TK302III TF

Length	464 mm
Height	189 mm
Width	216 mm



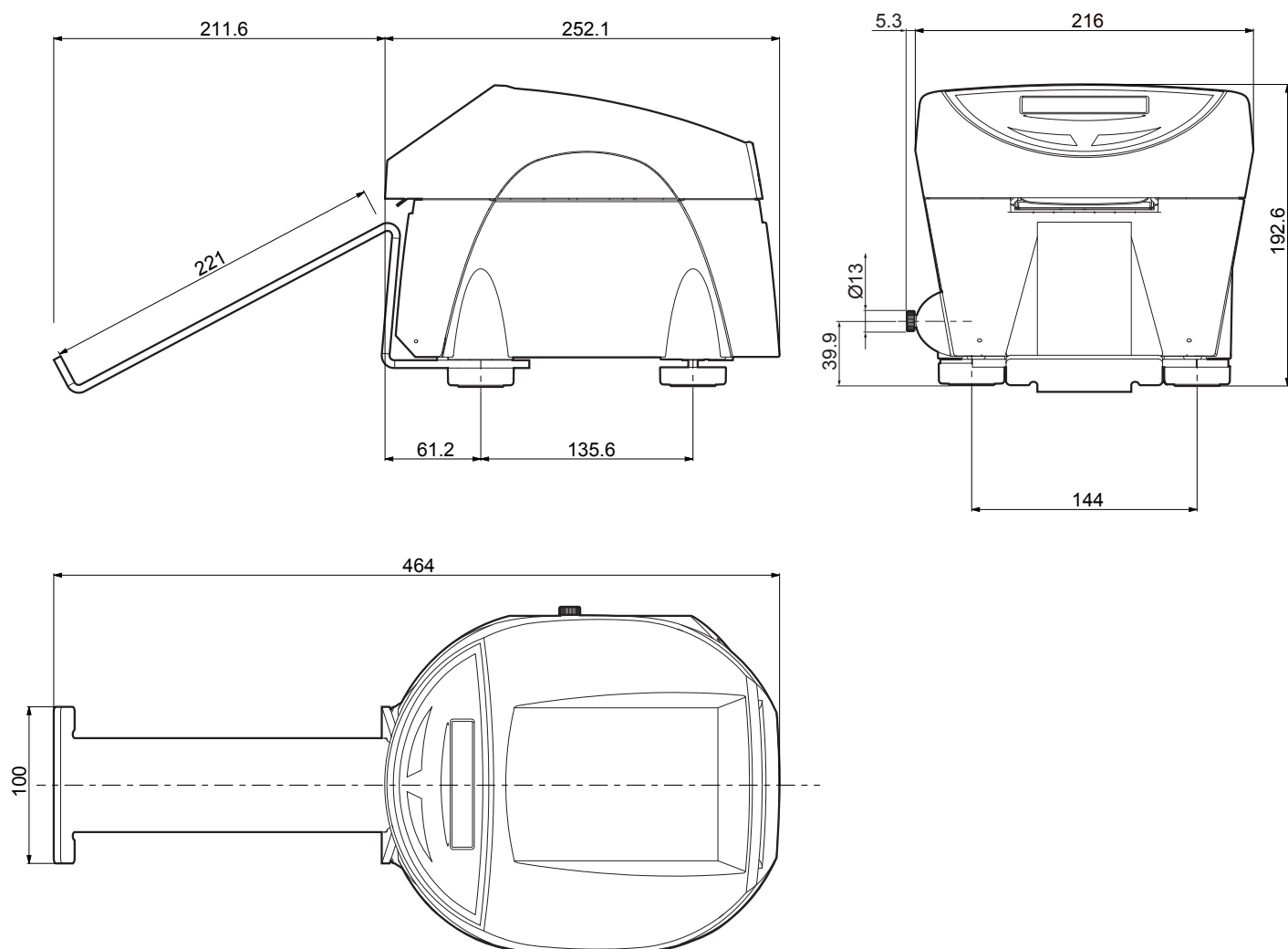


9.9 Device dimensions with plastic ticket tray code 976BD010000001 (optional)

All the dimensions shown in the following figure are in millimetres and referred to devices with covers closed

TK302III, TK302III TF

Length	464 mm
Height	192.6 mm
Width	216 mm





9.10 Dimensions of power supply and power cord

The following table shows the dimensions of power supply unit and power cords available for the device.

POWER SUPPLY code 963GE020000112

(OPTIONAL for KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL,
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL;
INCLUDED with TK202III, TK302III, TK302III TF)

Length 146.2 mm

Height 39 mm

Width 75.2 mm

POWER CORD WITH SHUKO PLUG code 26100000000311

(OPTIONAL for KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL,
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL;
INCLUDED with TK202III, TK302III, TK302III TF)

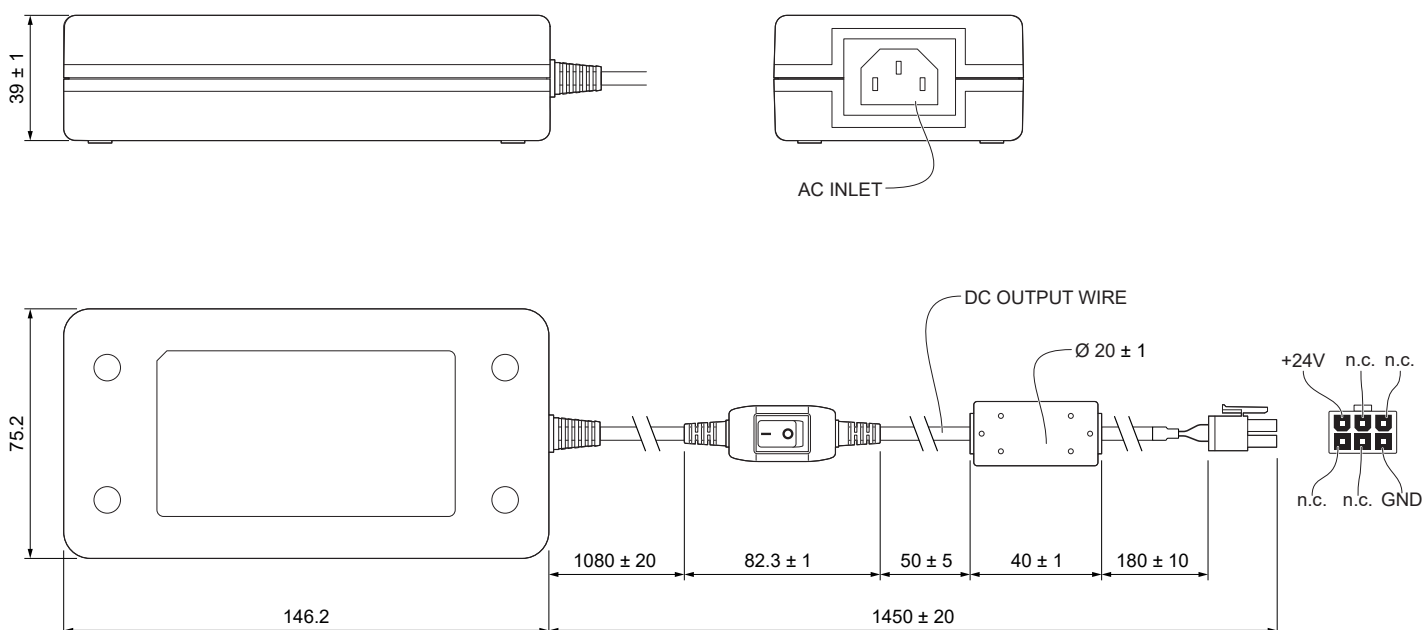
Length 2000 mm

POWER CORD WITH UK PLUG code 26100000000313 (optional for every model)

Length 2000 mm

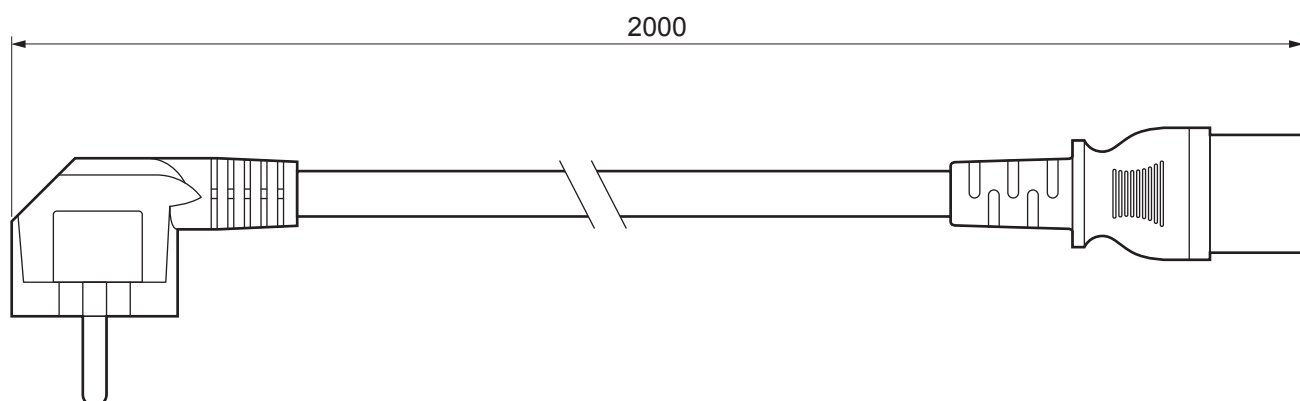
All the dimensions shown in following figures are in millimetres.

POWER SUPPLY code 963GE020000112

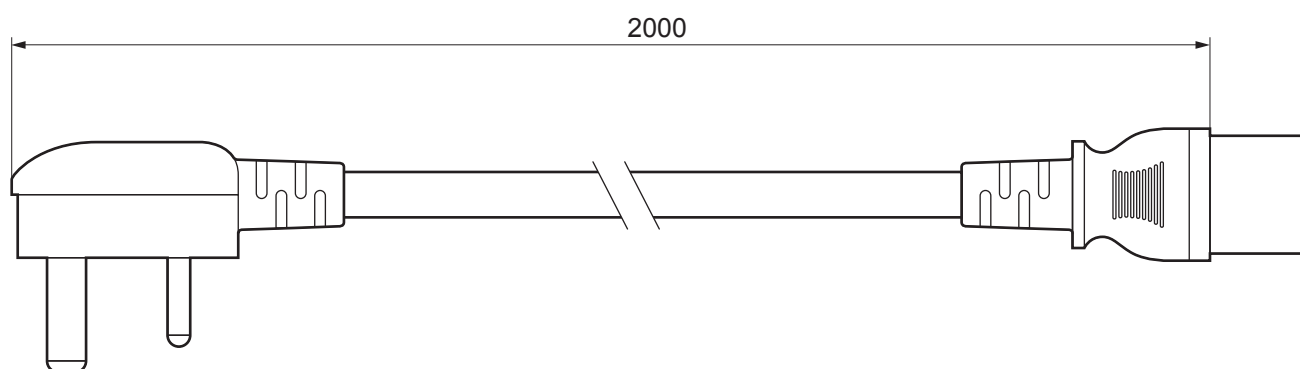




POWER CORD code 2610000000311



POWER CORD code 2610000000313



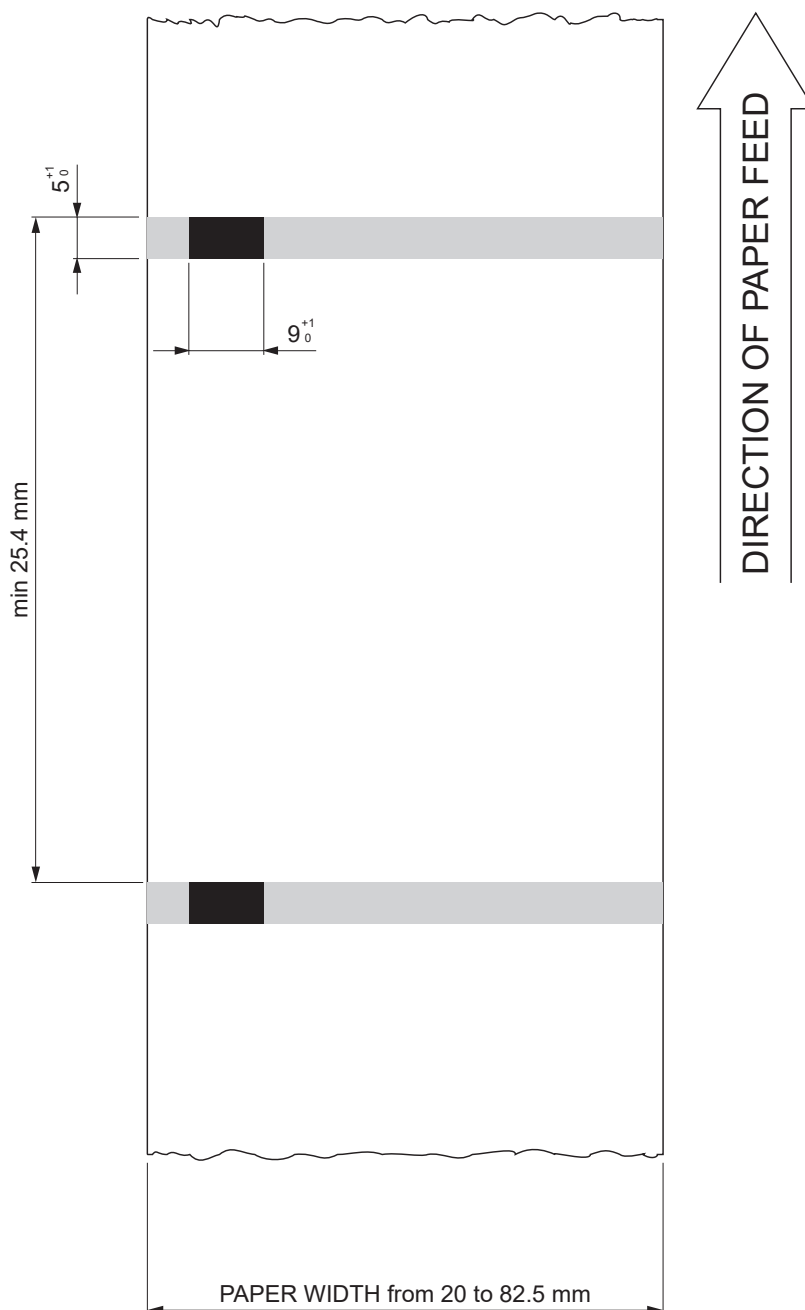


9.11 Paper specification

Paper with black mark

The following image shows the placement of the black mark on paper (dimensions in millimeters). The black mark can be printed both on the thermal side and on the non-thermal side of paper and it can be placed anywhere on the whole width of the paper.

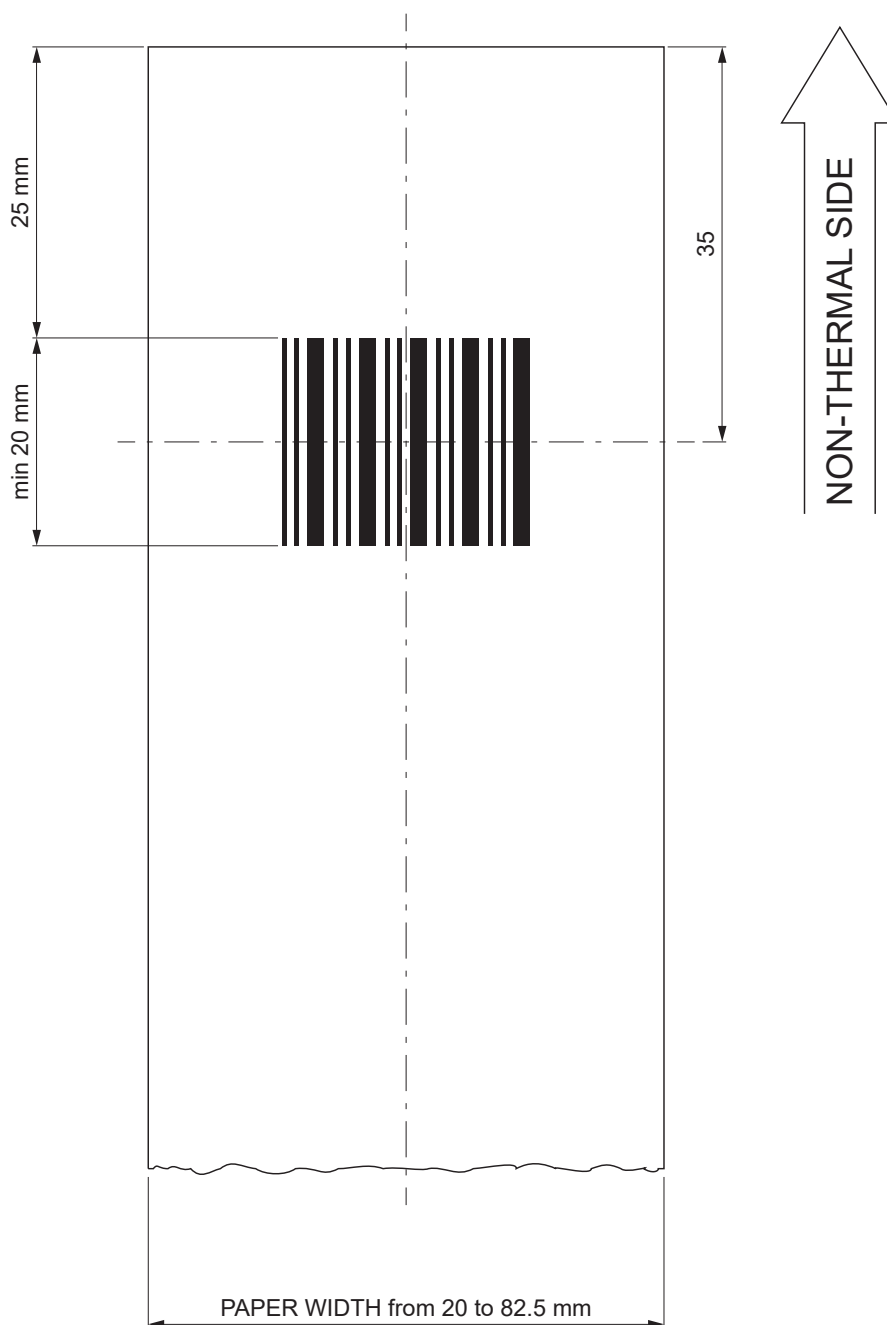
For more information about the use of paper with black mark see [chapter 7](#).



Paper with barcode (for models with barcode reader)

The following image shows the placement of the barcode on the ticket (dimensions in millimeters). The barcode must be printed on the non-thermal side of the paper and at 25 mm from the edge of the ticket to ensure the correct barcode reading when ticket alignment is performed.

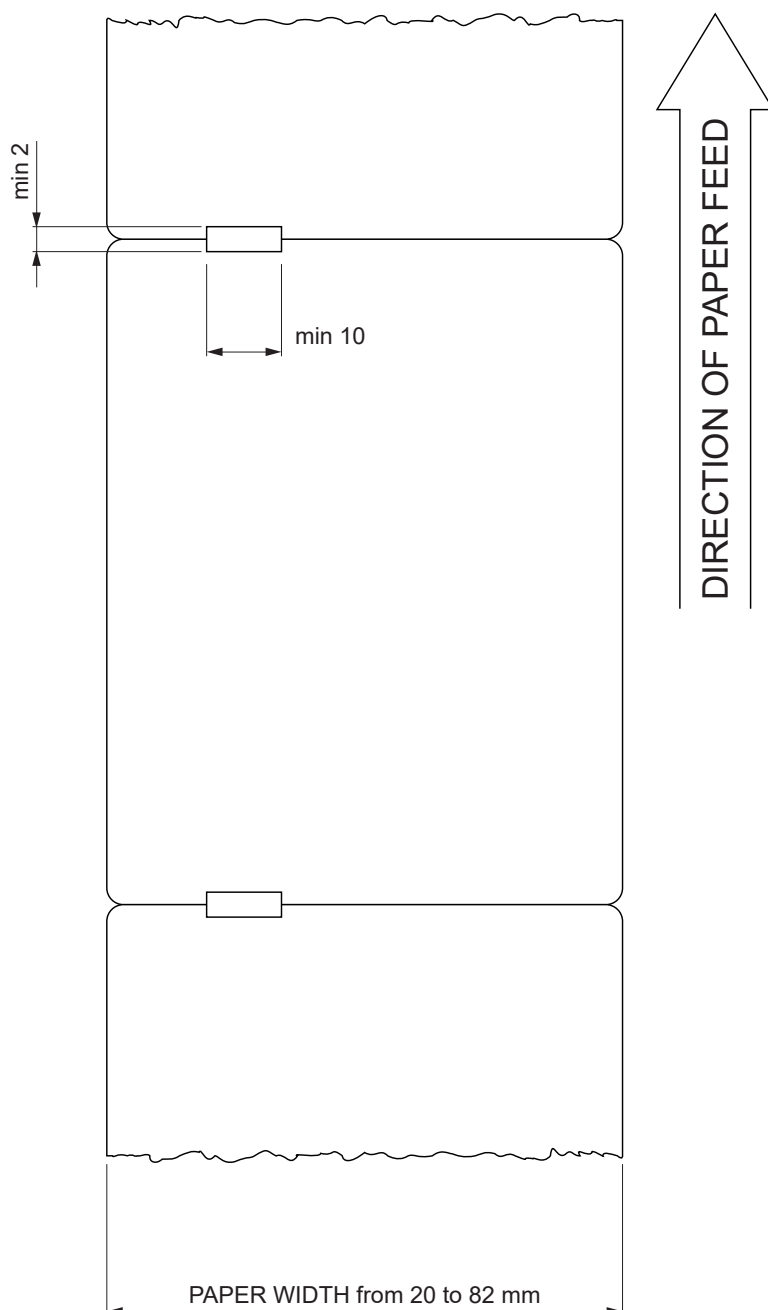
For more information about the use of paper with barcode see [chapter 7](#).



Fan-fold paper with hole
(KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
TK202III, TK302III)

The following image shows the placement of the hole on the paper (dimensions in millimeters). The hole can be positioned across the width of the ticket.

To manage tickets with hole, set the parameter "Black Mark position" to the value "Transparent" (see [paragraph 6.8](#)).
For more information about the use of paper with hole see [chapter 7](#).



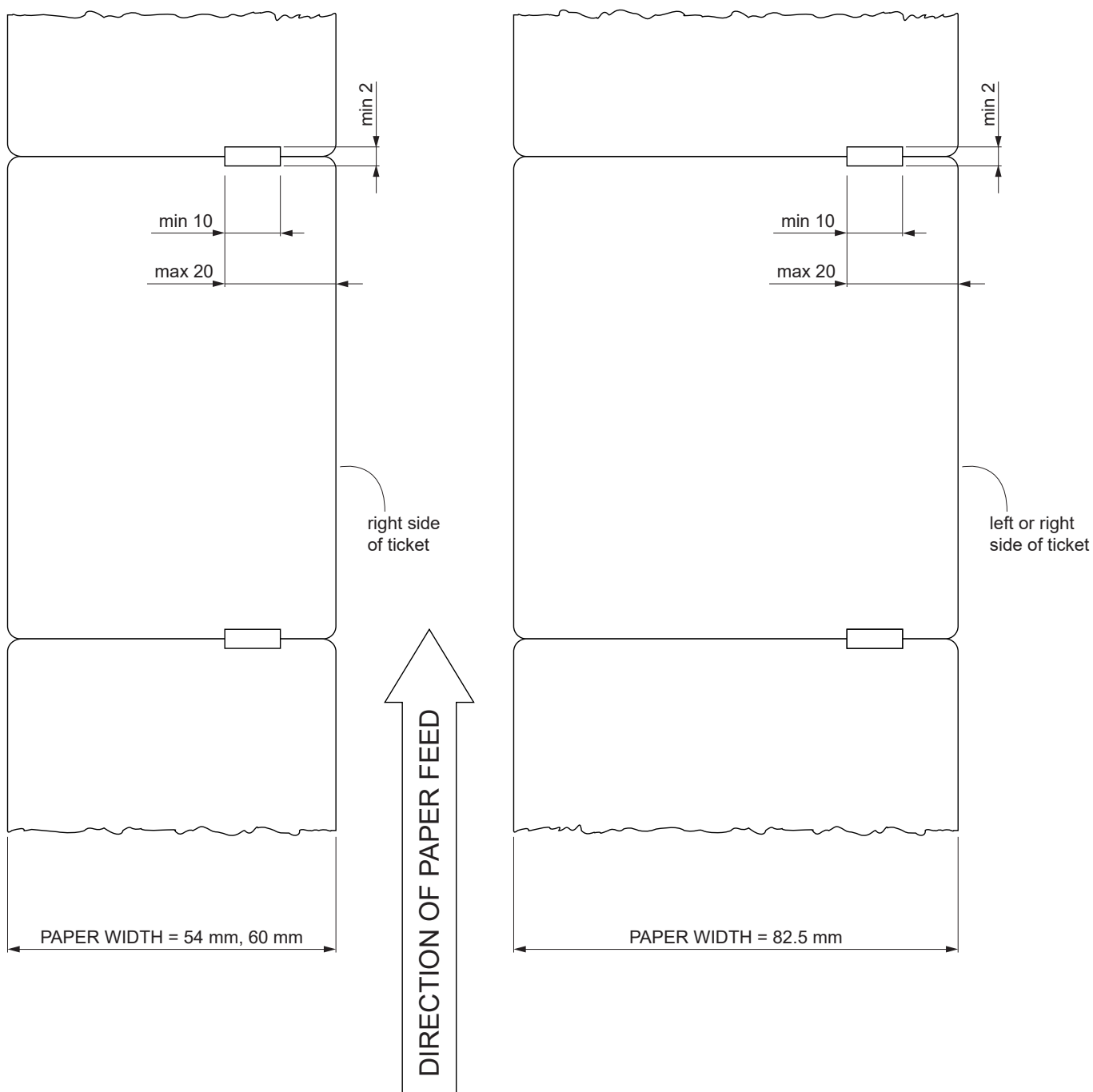
Fan-fold paper with hole
(KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL)

The following image shows the placement of the hole on the paper (dimensions in millimeters). The hole can be positioned across the width of the ticket.

To manage tickets with hole, set the parameter "Black Mark position" to the value "Transparent" (see [paragraph 6.8](#)). For more information about the use of paper with hole see [chapter 7](#).

The hole must be positioned in a lateral position on ticket:

- for paper width = 82.5 mm, the hole may be positioned on the left and on the right side of the ticket
- for paper width = 54 mm or 60 mm, the hole may be positioned only on the right side of the ticket (next to the fixed paper guide).



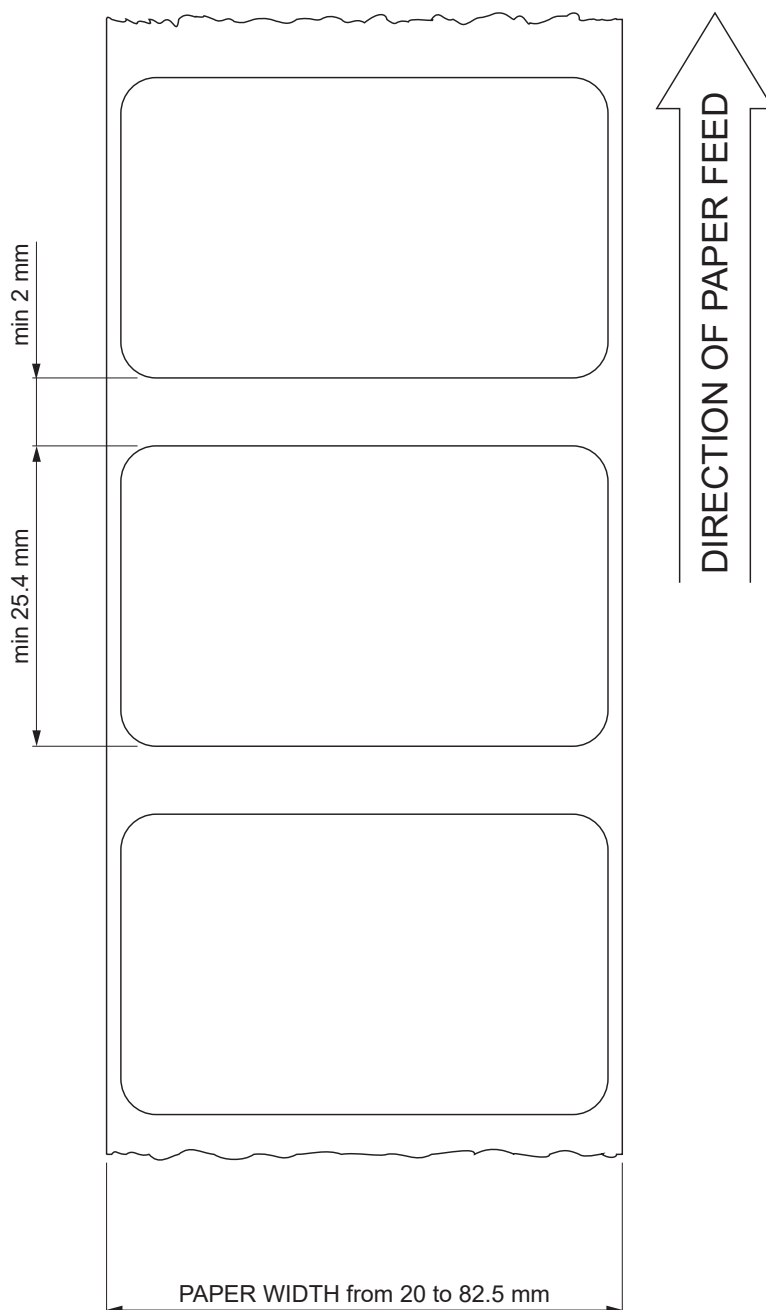
Paper with labels

(KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL

TK202III, TK302III)

The following image shows a portion of paper with labels (dimensions in millimeters). To manage paper with label, you need to set a negative value for the parameter “Black mark distance” (see [paragraph 6.8](#)).

For more information about the use of paper with hole see [chapter 7](#).



Ticket with RFID tag (models with RFID reader/writer)

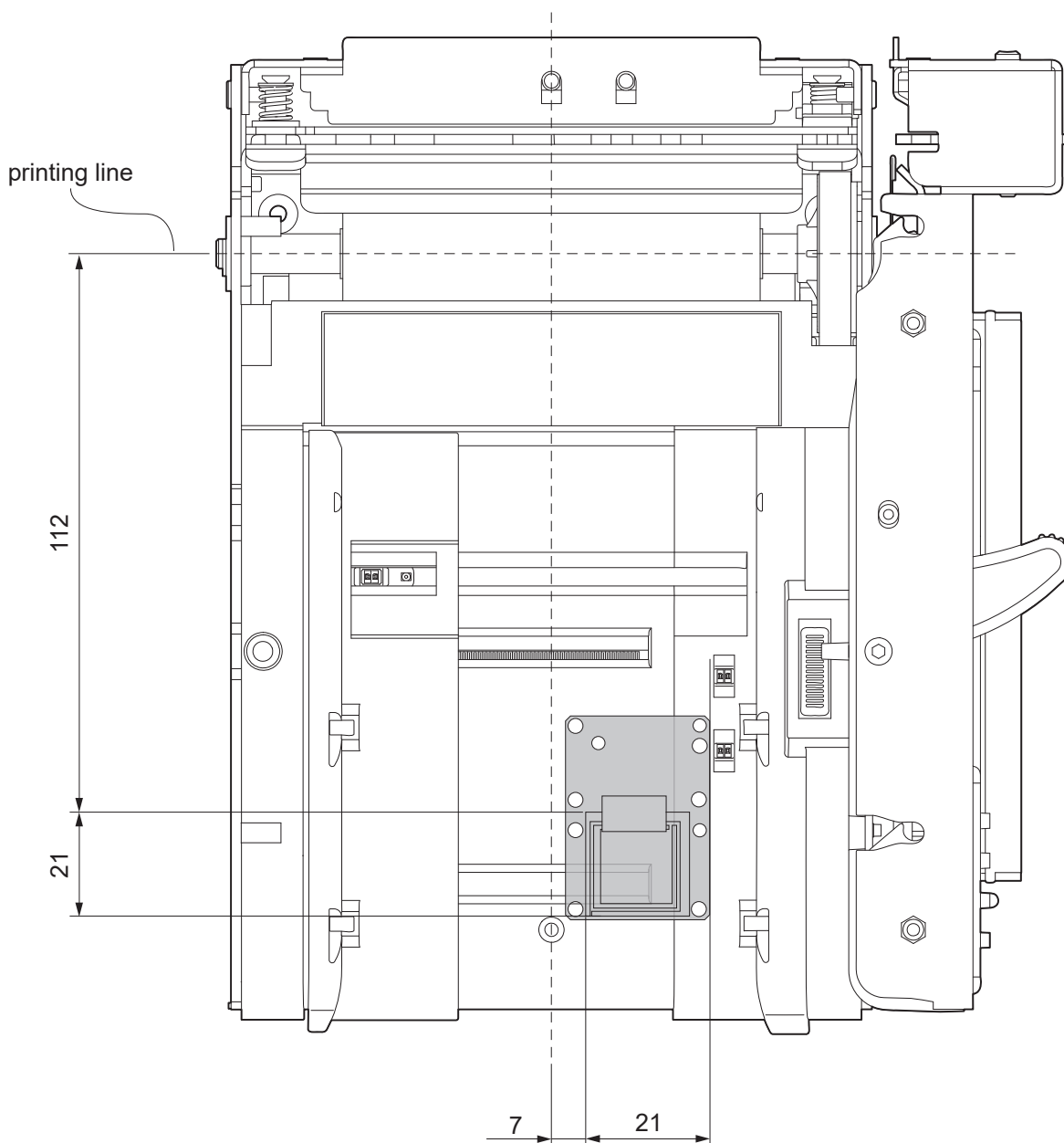
RFID (acronym for Radio Frequency IDentification) is a technology to identify automatically items using radio waves; this system is based on wireless data capture from RFID tag using appropriate readers. The RFID tag, or transponder, is made up of:

- the microchip that stores the data (including also a unique serial number written);
- an RFID antenna.

The device models equipped with RFID reader are equipped with an RFID transceiver, provided with antenna, that allows to send and receive RF data to and from the tag. For this application the ticket dimensions are not binding but for good reading is important that the tag inside the ticket, after alignment, intersects the antenna area.

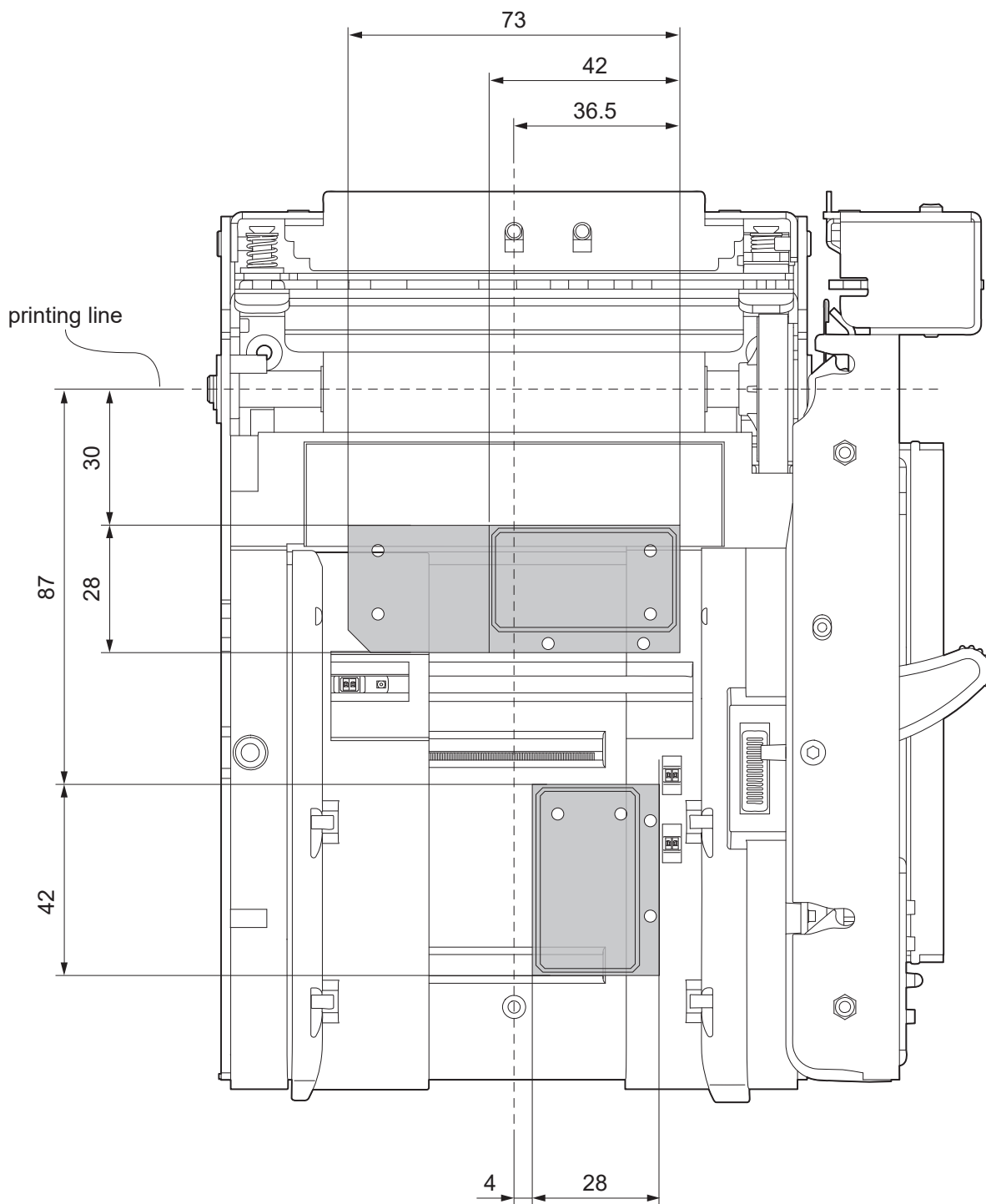
The following figures show the available positions of antenna RFID inside the device (dimensions in millimeters).

models with UHF RFID module





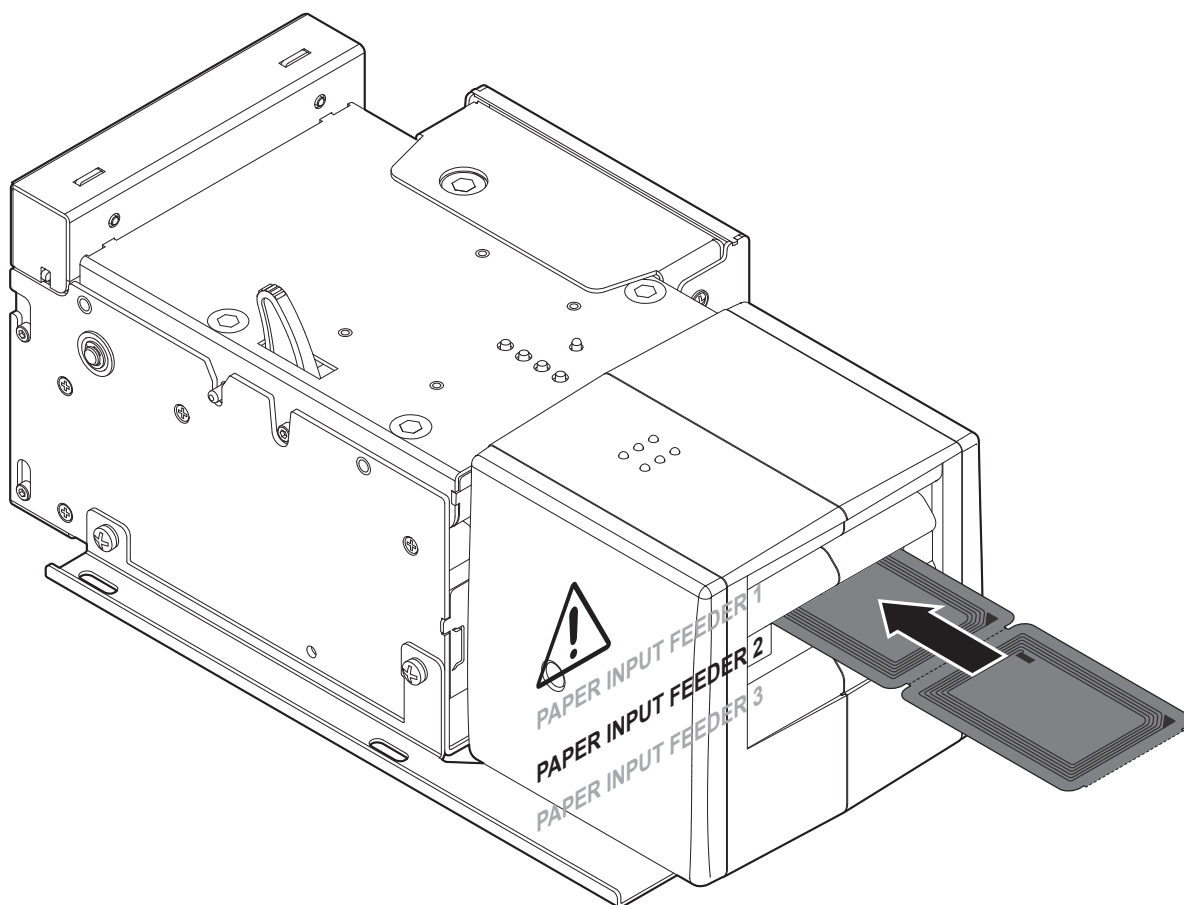
models with HF RFID module





To use ticket with RFID tag with models with triple feeder, it is recommended to load ticket into the input feeder 2 (the central one), as shown in following figure.

The use of paper inputs 1 and 3 causes a slight bending of paper and therefore the integrity of TAG RFID is not guaranteed. Before proceeding, check with a sample ticket.



NOTE: For ease of reference, for some models is represented only the printer group without external plastic chassis or triple feeder.



9.12 Character sets in CUSTOM/POS emulation

The device has 3 fonts of varying width (11, 15 and 20 cpi) which may be related one of the coding tables provided on the device.

To know the coding tables actually present on the device, you need to print the font test (see [paragraph 3.6](#)).

You can set font and coding table by using the commands (see the commands manual of the device) or using the “Code Page” and the “Chars/Inch” parameters during the setup procedure (see [paragraph 6.7](#)).

The following is the full list of coding tables that can be installed on the device.

<CodePage>	Coding table	
0	PC437 - U.S.A., Standard Europe	
1	Katakana	
2	PC850 - Multilingual	
3	PC860 - Portuguese	
4	PC863 - Canadian/French	
5	PC865 - Nordic	
6	VISCII - Vietnamese Standard Code	
11	PC851 - Greek	on request
12	PC853 - Turkish	on request
13	PC857 - Turkish	
14	PC737 - Greek	
15	ISO8859-7 - Greek	on request
16	WPC1252 - Scandinavian	on request
17	PC866 - Cyrillic 2	
18	PC852 - Latin 2	
19	PC858 per simbolo Euro in posizione 0xD5	
20	KU42 - Thai	
21	TIS11 - Thai	on request
26	TIS18 - Thai	on request
30	TCVN_3 - Vietnamese	on request
31	TCVN_3 - Vietnamese	on request
32	PC720 - Arabic	on request
33	WPC775 - Baltic Rim	on request
34	PC855 - Cyrillic	



<CodePage>	Coding table	
35	PC861 - Icelandic	on request
36	PC862 - Hebrew	
37	PC864 - Arabic	
38	PC869 - Greek	on request
39	ISO8859-2 - Latin 2	on request
40	ISO8859-15 - Latin 9	on request
41	PC1098 - Farsi	
42	PC1118 - Lithuanian	on request
43	PC1119 - Lithuanian	on request
44	PC1125 - Ukrainian	
45	WPC1250 - Latin 2	
46	WPC1251 - Cyrillic	
47	WPC1253 - Greek	
48	WPC1254 - Turkish	
49	WPC1255 - Hebrew	
50	WPC1256 - Arabic	
51	WPC1257 - Baltic Rim	
52	WPC1258 - Vietnamese	
53	KZ1048 - Kazakh	
255	Space page	

In CUSTOM/POS emulation, it is possible to use TrueType fonts. To be used, a TrueType font must be monospace type (every character of the font must have the same dimension). The check is made by the device when the font is selected. TrueType fonts will be automatically scaled by the device in order to obtain the same available width for the embedded fonts (11, 15 and 20 cpi for the 200 dpi models and 16, 23 and 30 cpi for the 300 dpi models).

The quality of TrueType fonts and the correct positioning into the printable area will result from the font producers and the font implementation.

For the correct printing of the code pages, it is necessary that the selected TrueType font contains all the characters in the tables. Otherwise, the '□' symbol will be printed instead the missing character.

All commands for printing configuration are usable both with TrueType fonts and with embedded fonts.

It is possible to address the TrueType font respects the UNICODE standard (see www.unicode.org), by using UTF-8 or UTF-16 encoding.



9.13 Character sets in SVELTA emulation

In SVELTA emulation the device has 18 embedded fonts of varying width which may be accessed through control characters (see commands description in SVELTA emulation of command manual). The following list shows the font available and relative dimensions in dot:

- Font HEL8PT8 ^(A) Proportional font with fixed height (H = 28 dot)
- Font HEL10PT8 ^(A) Proportional font with fixed height (H = 34 dot)
- Font HEL14PT8 ^(A) Proportional font with fixed height (H = 50 dot)
- Font HEL16PT8 ^(A) Proportional font with fixed height (H = 55 dot)
- Font 8x12 ^(B) Fixed font
- Font 8x12_2 ^(B) Fixed font
- Font 12x12 ^(B) Fixed font
- Font 14x11 ^(B) Fixed font
- Font 16x24 ^(B) Fixed font
- Font 16x24_2 ^{(B) (C)} Fixed font
- Font 16x24_3 ^{(B) (C)} Fixed font
- Font 20x15 ^(B) Fixed font
- Font 28x20 ^(B) Fixed font
- Font 14x24 ^{(B) (C)} Fixed font
- Font 16x24CUR ^{(B) (C)} Fixed font
- Font OCRB (20x32) ^(C) Fixed font
- Font GB18030 Fixed font
- Font CP949 Fixed font

For further information to characters representations print directly the font test ^(D).

In SVELTA emulation, it is possible to use TrueType fonts. True Type fonts are printable with every angle of rotation and in bold, reverse, italic and underlined mode.

It is possible to address the TrueType font respects the UNICODE standard (see www.unicode.org), by using UTF-8 or UTF-16 encoding.

For the correct printing of the code pages, it is necessary that the selected TrueType font contains all the characters in the tables. Otherwise, the '□' symbol will be printed instead the missing character.

NOTES:

(A) : A proportional font is a font in which different characters have different pitches (width).

(B) : A fixed font is the opposite of a proportional font and is a fixed-pitch font.

(C) : The fonts with the same name and dimension contain different characters in different positions from theirs.

(D) : During power-up, if the FF FORM FEED key is held down, the device executes the font test.



10 CONSUMABLES

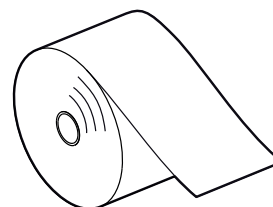
The following table shows the list of available consumables for device:

KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL

67300000000386

THERMAL PAPER ROLL

weight = 180 g/m²
width = 80 mm
Ø external = 180 mm
Ø core = 25 mm

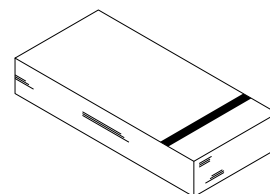


TK202III, TK302III, TK302III TF

67A00000000304

FAN-FOLD (100 tickets)

weight = 140 g/m²
dimensions = 152 mm x 80 mm



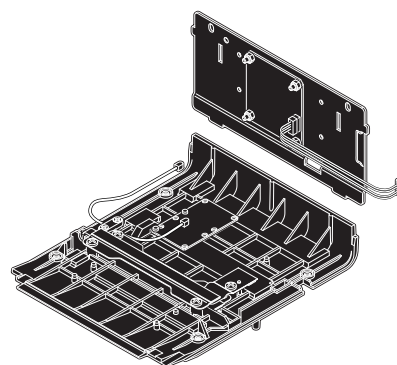


11 ACCESSORIES

The following table shows the list of available accessories for device.

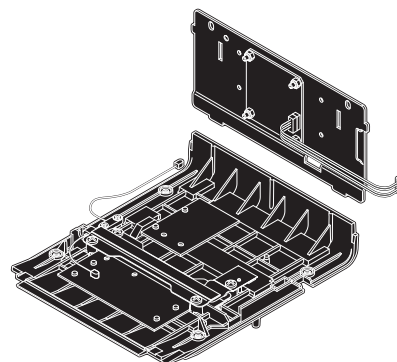
918AV030200000

KIT UHF RFID
(for technical specifications, see [paragraph 9.1](#))



918AV030100000

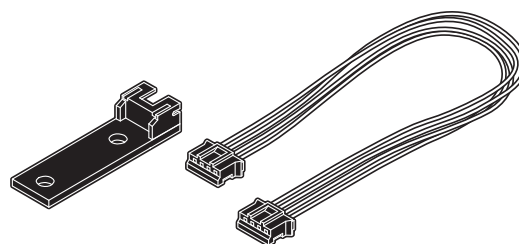
KIT HF RFID
(for technical specifications, see [paragraph 9.1](#))



KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL

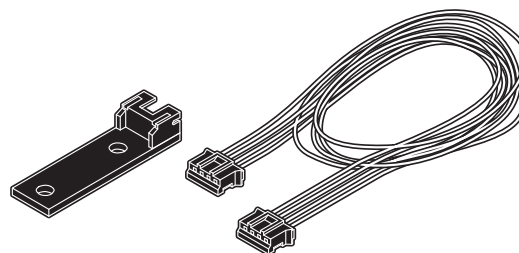
26300000000452

WIRING KIT WITH LOW PAPER SENSOR
length = 330 mm



26300000000599

WIRING KIT WITH LOW PAPER SENSOR
length = 600 mm





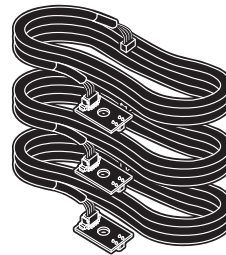
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL, TK302III TF

26300000000453

WIRINGS KIT WITH LOW PAPER SENSORS

length = 2 m

(see [paragraph 11.2](#))

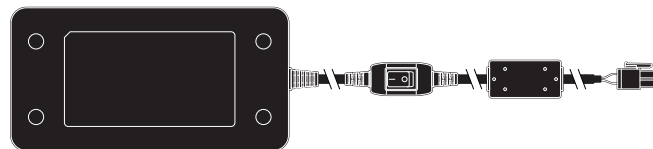


KPM302III, KPM302III EJ, KPM302III vSEL, KPM302III hSEL
KPM302III TF, KPM302III TF-EJ, KPM302III TF-hSEL

963GE020000112

POWER SUPPLY

(for technical specifications, see [paragraph 9.1](#))



26100000000311

MAINS CABLE SHUKO PLUG

length = 2 m



26100000000313

MAINS CABLE UK PLUG

length = 2 m

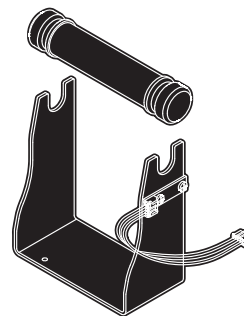


974AU010000305

PAPER ROLL HOLDER

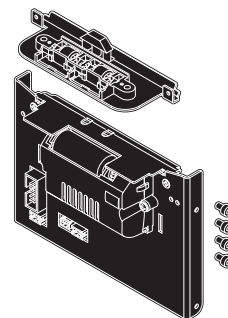
with cable length = 0.33 m

(see [paragraph 11.1](#))



976AV210000001

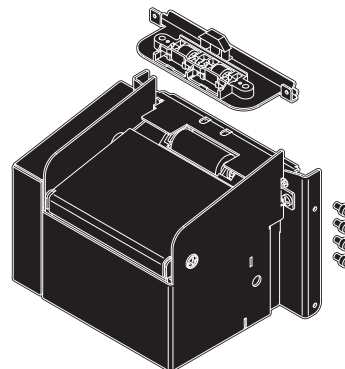
EJECTOR DEVICE



976AV210000002

SELECTOR DEVICE
FOR HORIZONTAL FIXING

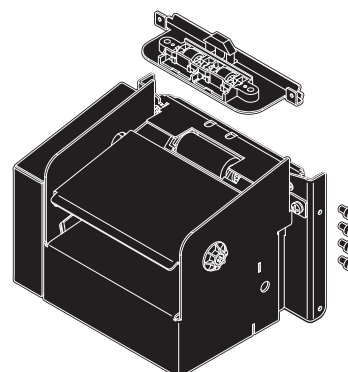
(To use this accessory, it is necessary to set the setup parameter
"Selector" on the "Enabled" value - see [paragraph 6.7](#))



976AV210000003

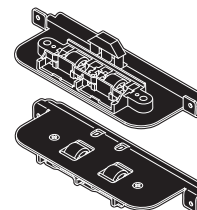
SELECTOR DEVICE
FOR VERTICAL FIXING

(To use this accessory, it is necessary to set the setup parameter
"Selector" on the "Enabled" value - see [paragraph 6.7](#))



976AV010000002

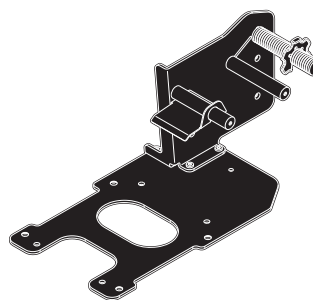
CUT&HOLD KIT





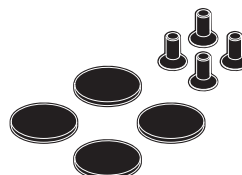
974BA010000001

PAPER ROLL HOLDER



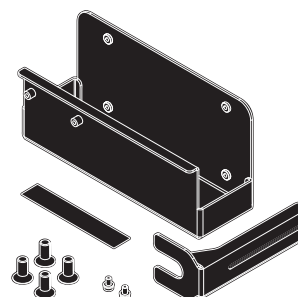
976BB010000014

KIT FOR HEIGHT REDUCTION
(only for models with paper roll holder
code 974BA010000001)



976BB010000001

KIT FOR POWER SUPPLY CONTAINER
(only for models with paper roll holder
code 974BA010000001)





TK302III, TK302III TF

26500000000357

USB CABLE
with 90 degree connector
length = 1.8 m



26500000000048

USB CABLE
with 90 degree connector
length = 3 m



26500000000331

SERIAL CABLE
with 90 degree connector
length = 1.8 m



26500000000043

SERIAL CABLE
with 90 degree connector
length = 3 m



26100000000311

MAINS CABLE SHUKO PLUG
length = 2 m



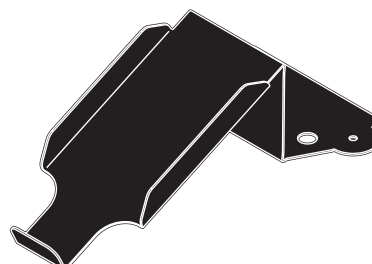
26100000000313

MAINS CABLE UK PLUG
length = 2 m



976BB01000003

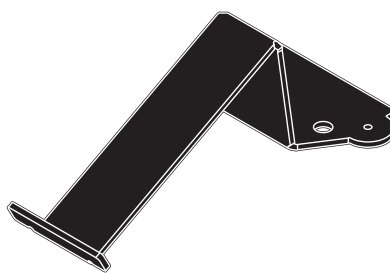
METAL TICKET TRAY





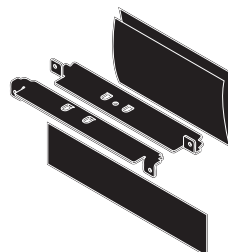
976BD010000001

PLASTIC TICKET TRAY



976BA010000323

KIT FOR BURSTER CONFIGURATION

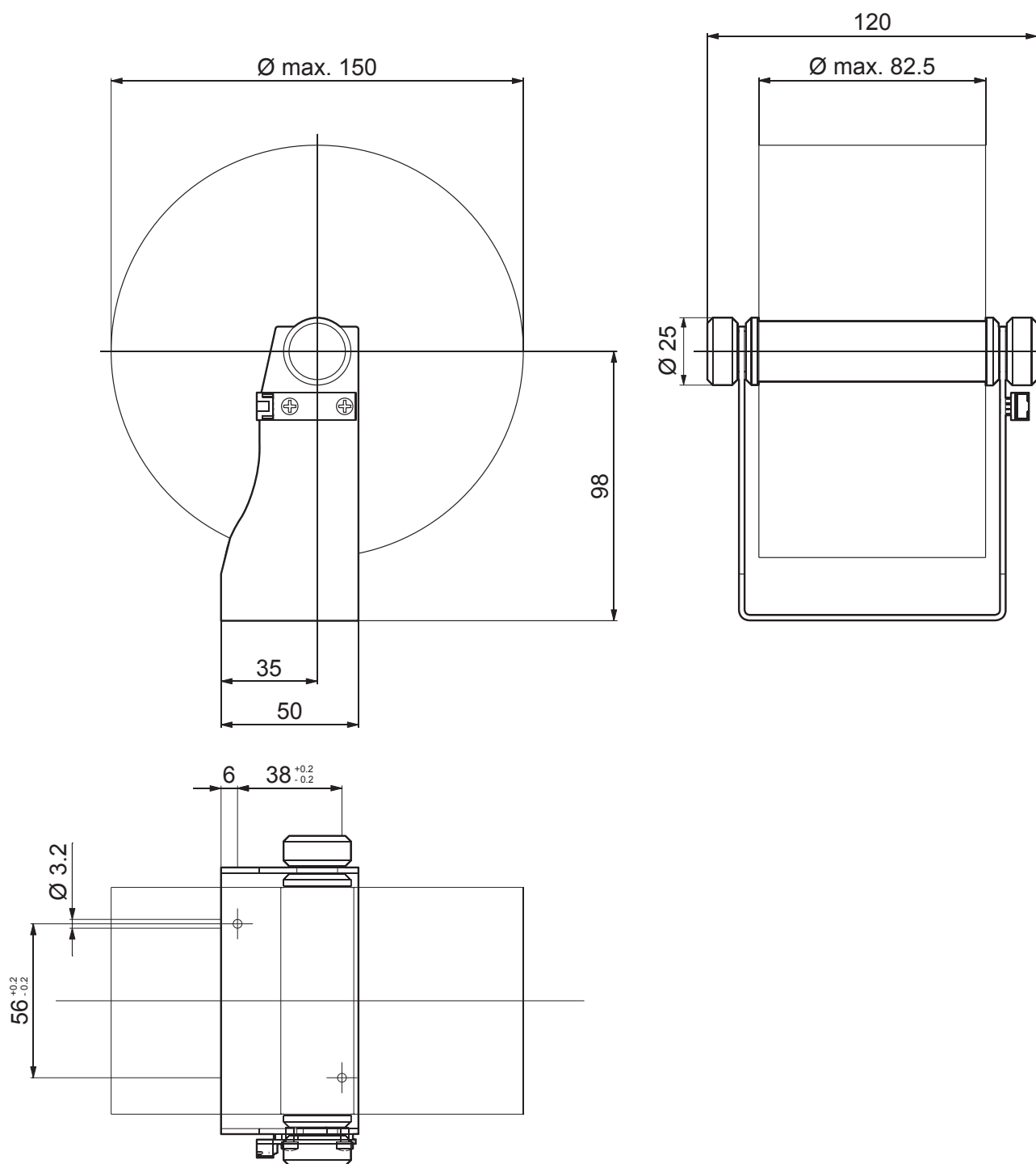




11.1 Paper roll holder code 974AU010000305 (optional)

For the device is available an external paper roll holder kit, supplied as accessory. The kit makes it possible to use paper rolls with larger diameter (up to 150 mm).

The following figure shows the dimensions for holder support and paper roll pin (all the dimensions in figure are in millimetres).



NOTE:

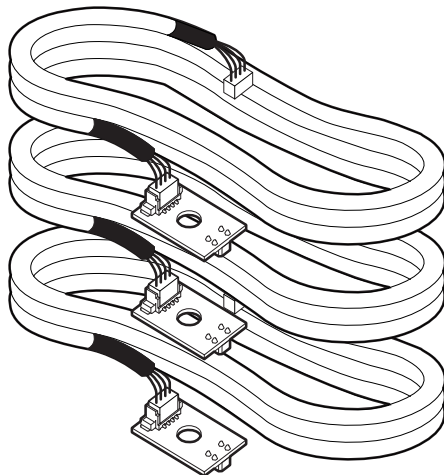
For external rolls diameter higher to 100 mm it's recommended to use a paper pre-tensioning device.



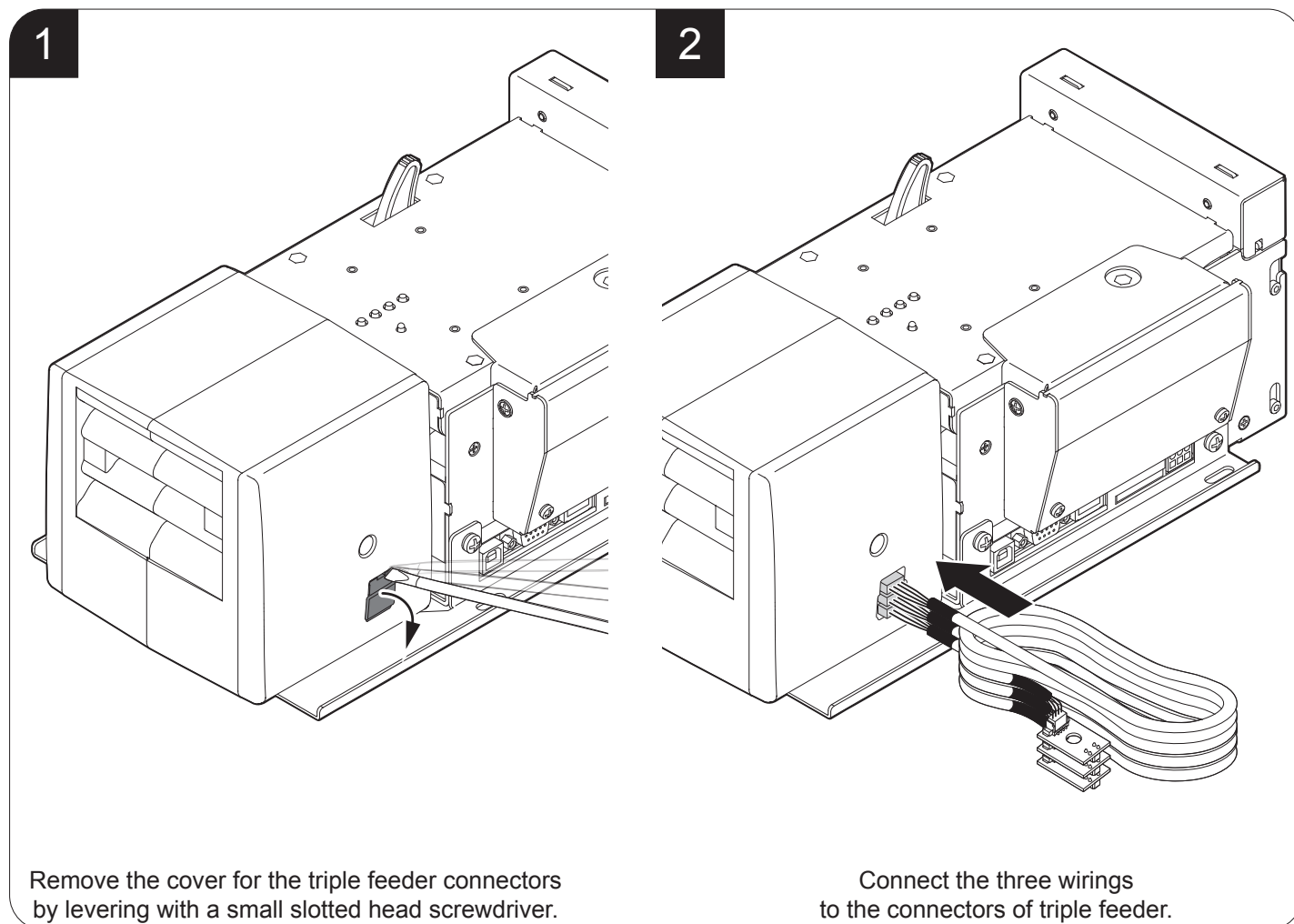
11.2 Wirings kit with low paper sensor boards code 2630000000453 (optional)

For the device is available a kit of wirings with low paper sensor, supplied as accessory. The kit makes it possible the connection between triple feeder and low paper sensors.

The kit includes three wirings assembled with three low paper sensor boards, as shown in following figure



For the assembly procedure, proceed as follows:





12 TECHNICAL SERVICE

In case of failure, contact the technical service accessing the website www.custom4u.it and using the support tools on the homepage. It is advisable to keep the identification data of the product at hand.

The product code, the serial number and the hardware release number can be found on the product label (see [paragraph 3.5](#)).

The firmware release number (SCODE) can be found:

- on the setup report (see [paragraph 6.1](#)),
- connecting the device to a PC and starting the "PrinterSet" tool (see [paragraph 6.2](#)).
- in the "setup.ini" file (see [paragraph 6.3](#)).

CUSTOM[®]

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