

Assembly Instructions



Label Printer

HERMES Q

MADE IN GERMANY

| Family | Type |
|----------|--------------|
| HERMES Q | HERMES Q2L |
| | HERMES Q4L |
| | HERMES Q4.3L |
| | HERMES Q6.3L |
| | HERMES Q2R |
| | HERMES Q4R |
| | HERMES Q4.3R |
| | HERMES Q6.3R |

Edition: 10/2019 – Part No. 9003408

Copyright

This documentation, as well as translations thereof, are the property of cab Produkttechnik GmbH & Co. KG.

The replication, conversion, duplication or distribution of the whole manual or parts thereof for purposes other than its original intended purpose require previous written authorization by cab.

Any software that is part of this system is made available under license and may be used or copied only in agreement with the license conditions.

Trademark

Microsoft® is a registered trademark of the Microsoft Corporation.

Windows 7® and Windows 8® are registered trademarks of the Microsoft Corporation.

TrueType™ is a registered trademark of Apple Computer, Inc.

Editor

Regarding questions or suggestions, please contact cab Produkttechnik GmbH & Co. KG, Germany.

Topicality

Due to the constant further development of our products, discrepancies between documentation and product may occur.

For the current edition, please see www.cab.de.

Terms and conditions

Deliveries and services are carried out according to the general sales conditions of cab.

Germany
cab Produkttechnik GmbH & Co KG
Karlsruhe
Phone +49 721 6626 0
www.cab.de

USA
cab Technology, Inc.
Chelmsford, MA
Phone +1 978 250 8321
www.cab.de/us

Taiwan
cab Technology Co., Ltd.
Taipei
Phone +886 (02) 8227 3966
www.cab.de/tw

China
cab (Shanghai) Trading Co., Ltd.
Guangzhou
Phone +86 (020) 2831 7358
www.cab.de/cn

France
cab Technologies S.à.r.l.
Niedermörsen
Phone +33 388 722501
www.cab.de/fr

Mexico
cab Technology, Inc.
Juárez
Phone +52 656 682 4301
www.cab.de/es

China
cab (Shanghai) Trading Co., Ltd.
Shanghai
Phone +86 (021) 6236 3161
www.cab.de/cn

South Africa
cab Technology (Pty) Ltd.
Randburg
Phone +27 11 886 3580
www.cab.de/za

Table of Contents

| | | |
|-----------|---|-----------|
| 1 | Introduction | 4 |
| 1.1 | Instructions | 4 |
| 1.2 | Intended Use | 4 |
| 1.3 | Safety Instructions | 5 |
| 1.4 | Safety Marking | 6 |
| 1.5 | Environment | 6 |
| 2 | Installation | 7 |
| 2.1 | Device Overview | 7 |
| 2.2 | Unpacking and Setting-up the Printer | 10 |
| 2.3 | Connecting the Device | 11 |
| 2.3.1 | Connecting to the Power Supply | 11 |
| 2.3.2 | Connecting to a Computer or Computer Network | 11 |
| 2.4 | Switching on the Device | 11 |
| 3 | Touchscreen Display | 12 |
| 3.1 | Start Screen | 12 |
| 3.2 | Navigation in the Menu | 14 |
| 4 | Loading Material | 15 |
| 4.1 | Loading Labels | 15 |
| 4.1.1 | Positioning the Media Roll on the Roll Retainer | 15 |
| 4.1.2 | Inserting the Labels into the Print Mechanism | 16 |
| 4.1.3 | Setting the Label Sensor | 16 |
| 4.1.4 | Guiding the Liner to the Internal Rewinder | 17 |
| 4.2 | Setting the Head Locking System | 18 |
| 4.3 | Setting the Peel-off Edge | 18 |
| 4.4 | Loading Transfer Ribbon | 19 |
| 4.5 | Setting the Feed Path of the Transfer Ribbon | 20 |
| 5 | Printing Operation | 21 |
| 5.1 | Printhead Protection | 21 |
| 5.2 | Synchronization of the Paper Feed | 21 |
| 5.3 | Peel-off Mode | 21 |
| 5.4 | Ribbon Saving | 21 |
| 6 | Cleaning | 22 |
| 6.1 | Cleaning Information | 22 |
| 6.2 | Cleaning the Print Roller | 22 |
| 6.3 | Cleaning the Printhead | 22 |
| 7 | Fault Correction | 23 |
| 7.1 | Error Display | 23 |
| 7.2 | Error Messages and Fault Correction | 23 |
| 7.3 | Problem Solution | 25 |
| 8 | Labels | 26 |
| 8.1 | Label Dimensions | 26 |
| 8.2 | Device Dimensions | 27 |
| 8.3 | Reflex Mark Dimensions | 28 |
| 8.4 | Cut-out Mark Dimensions | 29 |
| 9 | Assembly Dimensions | 30 |
| 10 | Licenses | 31 |
| 10.1 | Declaration of Incorporation | 31 |
| 10.2 | EU Declaration of Conformity | 32 |
| 10.3 | FCC | 32 |
| 11 | Index | 33 |

1.1 Instructions

Important information and instructions in this documentation are indicated as follows:



Danger!

Draws attention to an exceptionally great, imminent danger to health or life due to dangerous electrical voltage.



Danger!

Draws attention to a danger with high risk that, if not avoided, will result in death or serious injury.



Warning!

Draws attention to a danger with medium risk that, if not avoided, may result in death or serious injury.



Caution!

Draws attention to a danger with low risk that, if not avoided, may result in minor or moderate injury.



Attention!

Draws attention to potential risk of property damage or loss of quality.



Note!

Advice on facilitating the work-flow, or information on important steps.



Environment!

Tips for environmental protection.



Handling instructions.



Reference to chapter, position, image number or document.



Option (accessories, peripherals, special equipment).

Time

Viewed in the display/monitor.

1.2 Intended Use

- The printer is designed for the integration into a production line. It is intended exclusively for printing suitable materials that have been approved by the manufacturer and for coupling a cab or non-cab applicator which transfers labels from the printer to a product. Any other use or use going beyond this shall be regarded as improper use. The manufacturer/supplier shall not be liable for damage resulting from unauthorized use; the user shall bear the risk alone.
- The device is manufactured in accordance with the current technological status and the recognized safety rules. However, danger to the life and limb of the user or third parties and/or damage to the device and other tangible assets can arise during use.
- The device may only be used for its intended purpose and if it is in perfect working order, and it must be used with regard to safety and dangers as stated in the operating manual.
- Usage for the intended purpose also includes complying with the manual.



Note!

The complete documentation is included in the scope of delivery on DVD, and can also currently be found in the Internet.

1.3 Safety Instructions

- The device is configured for voltages of 100 to 240 V AC. It only has to be plugged into a grounded socket.
- Only connect the device to other devices which have a protective low voltage.
- Switch off all affected devices (computer, printer, accessories) before connecting or disconnecting.
- The device may only be used in a dry environment, do not expose it to moisture (sprays of water, mists, etc.).
- Do not use the device in an explosive atmosphere.
- Do not use the device close to high-voltage power lines.
- Ensure that people's clothing, hair, jewelry etc. do not come into contact with the exposed rotating parts.
- The device or parts of it, especially the printhead can become hot while printing. Do not touch during operation, and allow to cool down before changing material and before disassembly.
- Risk of crushing when closing the cover. Touch the cover at the outside only. Do not reach into the swivel range of the cover.
- Perform only those actions described in this operating manual.
Work going beyond this may only be performed by trained personnel or service technicians.
- Unauthorized interference with electronic modules or their software can cause malfunctions.
- Other unauthorized work on or modifications to the device can also endanger operational safety.
- Always have service work done in a qualified workshop, where the personnel have the technical knowledge and tools required to do the necessary work.
- There are various warning stickers on the device. They draw your attention to dangers.
Warning stickers must therefore not be removed, as then you and other people cannot be aware of dangers and may be injured.
- The maximum sound pressure level L_{pA} is less than 70 dB(A).

**Danger!**

Danger to life and limb from power supply.

- **Do not open the device casing.**

**Warning!**

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

1.4 Safety Marking

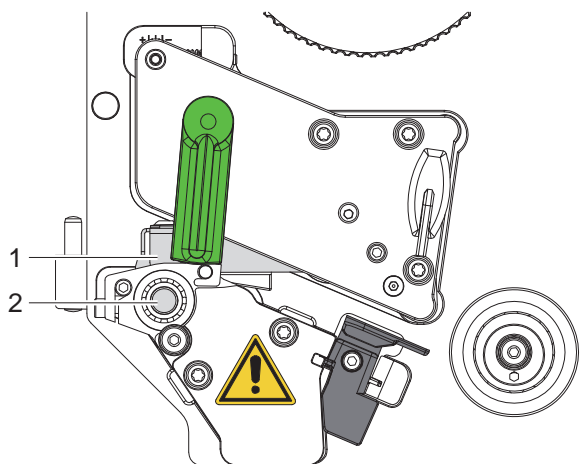


Figure 1 Safety marking



Danger spot !

- Risk of burning on the hot printhead assembly (1).
 - ▶ Do not touch the printhead during operation, and allow to cool down before changing material and before disassembly.
- Entanglement hazard by turning roller (2).
 - ▶ Ensure that people's clothing, hair, jewelry etc. do not come into contact with the exposed rotating parts.

1.5 Environment



Obsolete devices contain valuable recyclable materials that should be sent for recycling.

- ▶ Send to suitable collection points, separately from residual waste.

The modular construction of the printer enables it to be easily disassembled into its component parts.

- ▶ Send the parts for recycling.



The electronic circuit board of the device is equipped with a lithium battery.

- ▶ Take old batteries to collection boxes in shops or public waste disposal centers.

2.1 Device Overview

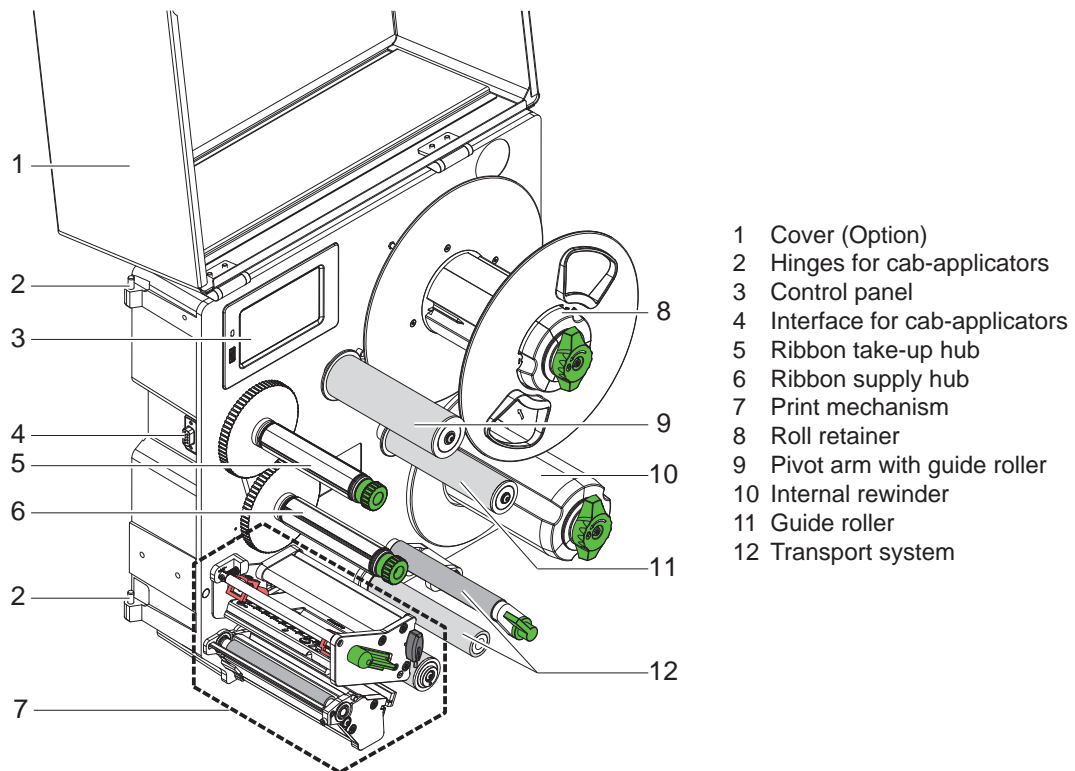


Figure 2 Overview HERMES Q-2

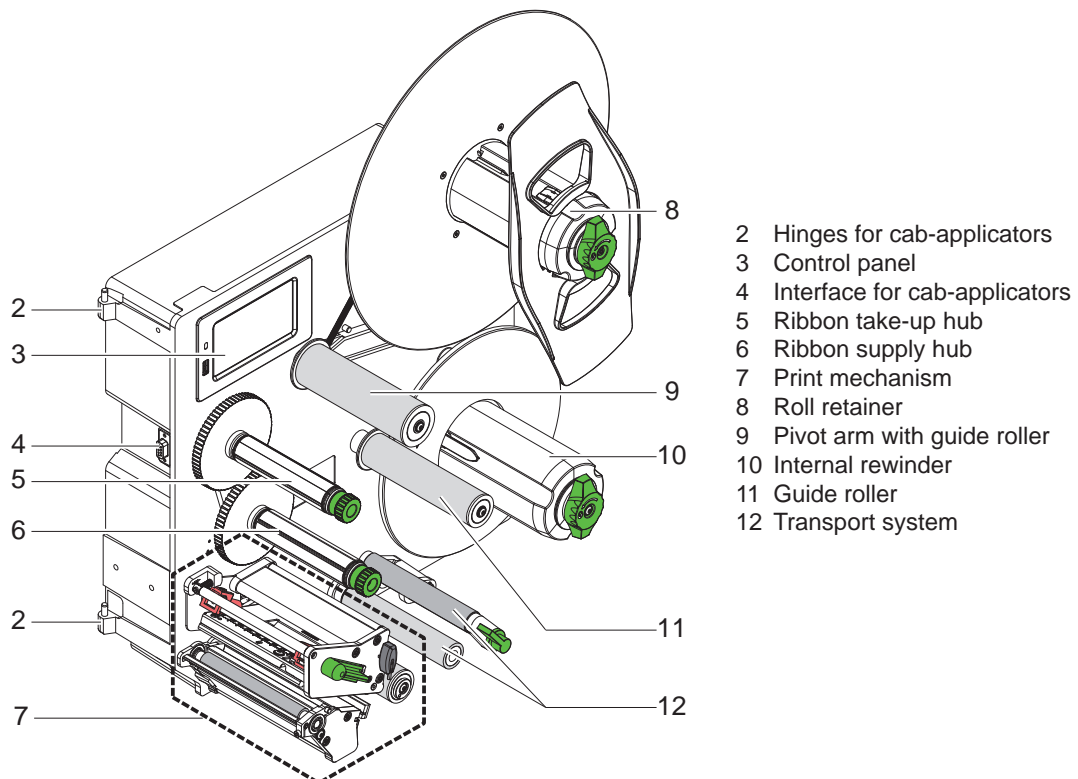


Figure 3 Overview HERMES Q-3

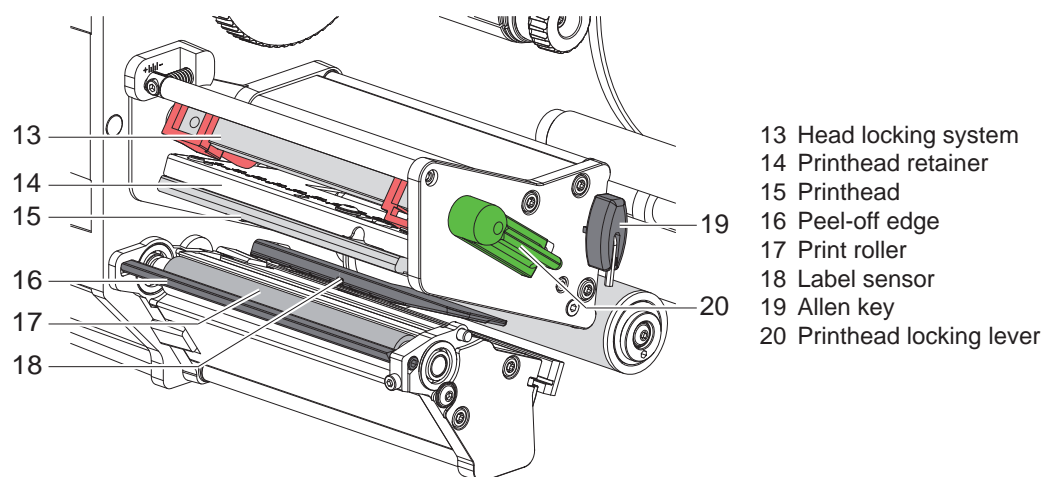


Figure 4 Print mechanism

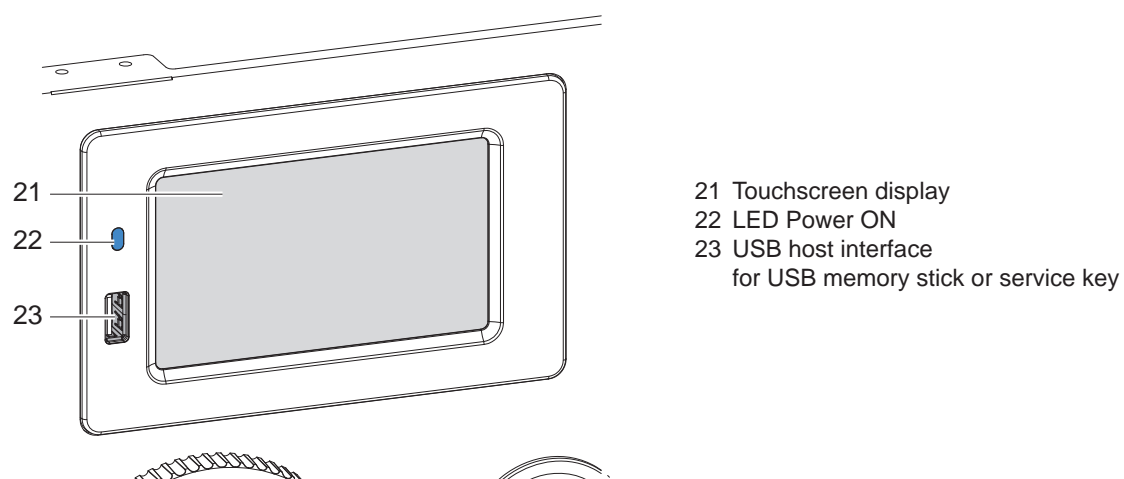


Figure 5 Control panel

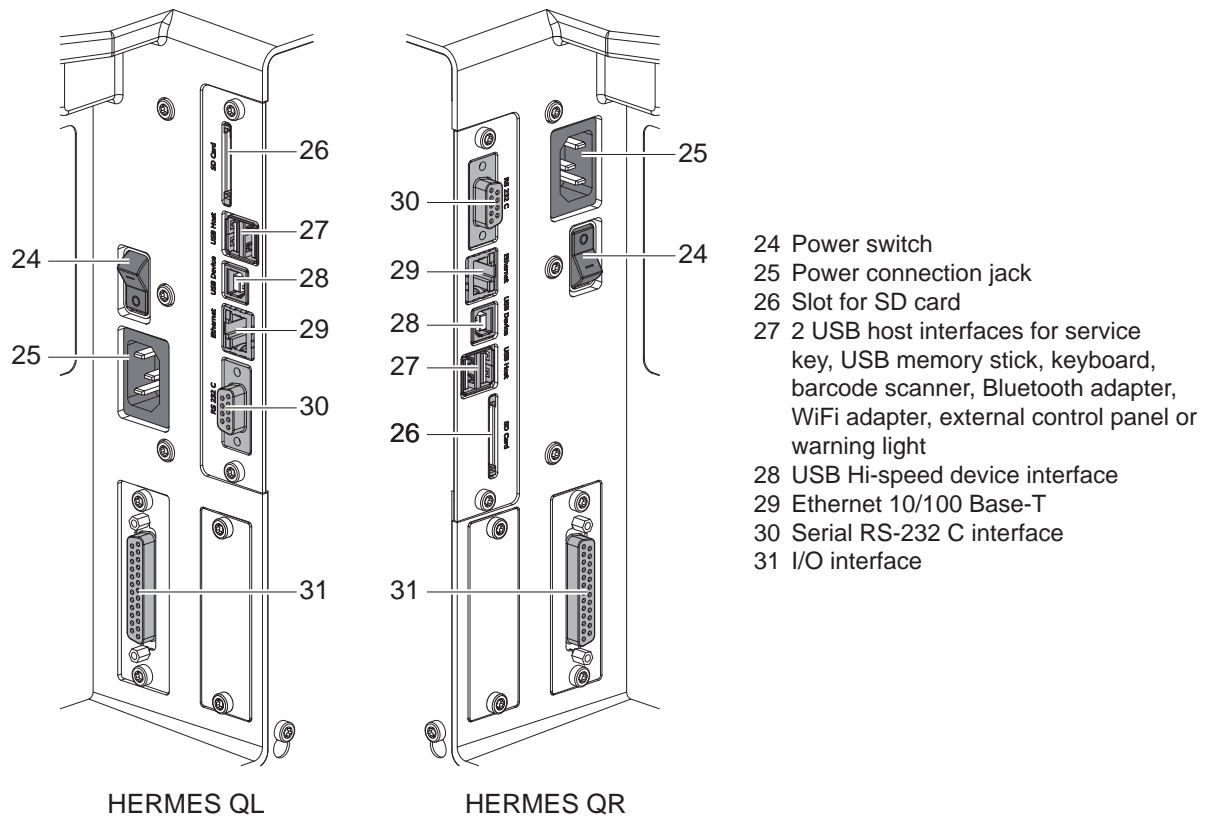


Figure 6 Connections

2.2 **Unpacking and Setting-up the Printer**

- ▶ Lift the printer out of the box.
- ▶ Check printer for damage which may have occurred during transport.
- ▶ Remove foam transportation safeguards near the printhead.
- ▶ Check delivery for completeness.

Contents of delivery:

- Printer
- Power cable
- USB cable
- Assembly instructions
- DVD with label software, Windows driver and documentation



Note!
Please keep the original packaging in case the printer must be returned.



Attention!
The device and printing materials will be damaged by moisture and wetness.
▶ Set up printers only in dry locations protected from splash water.

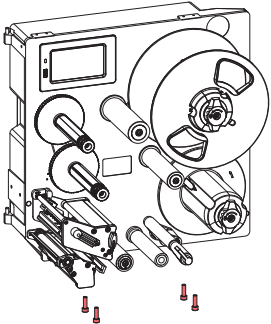
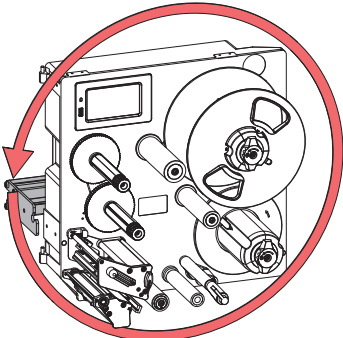
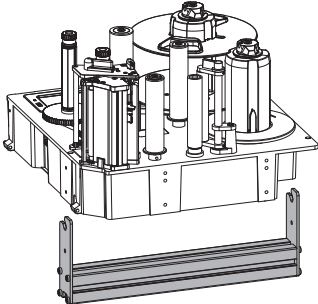
| | |
|---|--|
|  | <ul style="list-style-type: none">• Fixing at four M6x10 drillings on the bottom side of the chassis▶ Orientation upright standing only |
|  | <ul style="list-style-type: none">• Fixing via bracket at each two M6 drillings on both sides of the chassis▶ Orientation vertically, turnable by 360 degrees |
|  | <ul style="list-style-type: none">• Fixing via bracket at each two M6 drillings on both sides of the chassis▶ Orientation horizontally, with operator's side up |

Table 1 Permitted mounting orientations

2.3 Connecting the Device

2.3.1 Connecting to the Power Supply

The printer is equipped with a wide area power unit. The device can be operated with a supply voltage of 230 V~/50 Hz or 115 V~/60 Hz without adjustment.

1. Check that the device is switched off.
2. Plug the power cable into the power connection socket (25 / Figure 6).
3. Plug the power cable into a grounded socket.

2.3.2 Connecting to a Computer or Computer Network



Attention!

Inadequate or no grounding can cause malfunctions during operations.

Ensure that all computers and cables connected to the printer are grounded.

- Connect the printer to a computer or network by a suitable cable.

For details of the configuration of the other interfaces ► Configuration Manual.

2.4 Switching on the Device

When all connections have been made:

- Switch the printer on at the power switch (24 / Figure 6).
The printer performs a system test, and then shows the system status *Ready* on the display (21 / Figure 5).

The user can control the operation of the printer with the control panel, for example:

- Issuing, interrupting, continuing and canceling print jobs,
- Starting labelling cycles when operating the printer with applicator,
- Setting printing parameters, e.g. heat level of the printhead, print speed, interface configuration, language and time of day (▷ Configuration Manual),
- Control stand-alone operation with a memory module (▷ Configuration Manual),
- Update the firmware (▷ Configuration Manual).

Many functions and settings can also be controlled by software applications or by direct programming with a computer using the printer's own commands. ▷ Programming Manual for details.

Settings made on the touchscreen display make the basic settings of the label printer.



Note!

It is advantageous, whenever possible, to make adaptations to various print jobs in the software.

3.1 Start Screen

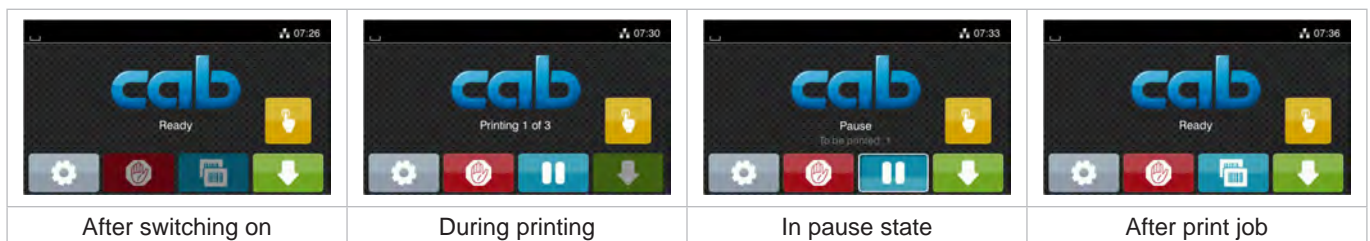


Figure 7 Start screen

The touchscreen display is operated directly by touch:

- To open a menu or select a menu item lightly touch the corresponding symbol.
- To scroll in lists slide finger up or down on the display.

| | | | |
|------------------|--|--|-------------------------------|
| | Open the menu | | Repeat the last printed label |
| | Interrupt the print job | | Cancel all print jobs |
| | Continue the print job | | Feed a blank label |
| with applicator: | | | |
| | with print job: Alternately printing and applying a label | | |
| | without print job: Starting an applicator action | | |

Table 2 Symbols on the start screen



Note!

Inactive symbols are shaded.

In the headline several information are displayed as widgets depending on the configuration:



Figure 8 Widgets in the start screen












| | |
|---|--|
|  | Displays the current data transfer in the form of a falling drop. |
|  | The <i>Save data stream</i> function is active ▷ Configuration manual All received data are stored in a .lbl file. |
|  | Warning ribbon end ▷ Configuration manual The remaining diameter of the ribbon supply roll undershoots the set value. |
|  | SD card installed |
|  | USB memory installed |
|  | gray: Bluetooth adapter installed, white: Bluetooth connection active |
|  | WiFi connection active The WiFi strength is displayed by the number of white arcs. |
|  | Ethernet connection active |
|  | USB connection active |
|  | abc program active |
|  | Clock time |

Table 3 Widgets in the start screen

3.2 Navigation in the Menu

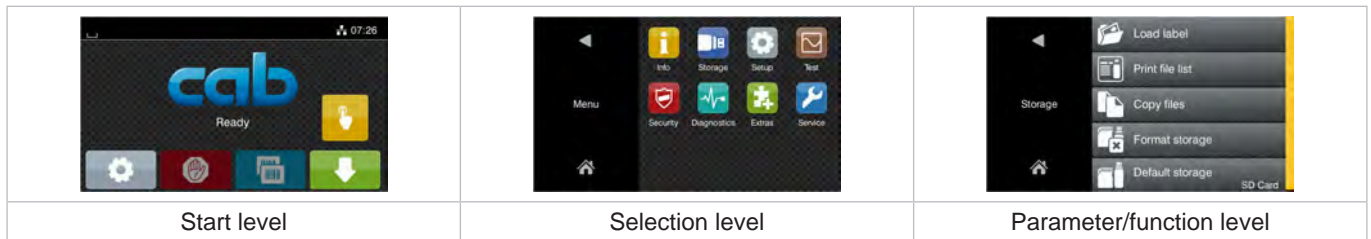





Figure 9 Menu levels

- ▶ To open the menu select  on the start screen.
- ▶ Select a theme in the selection level.
Several themes have substructures again with selection levels.
To return from the current level to the upper one select . To leave the menu select .
- ▶ Continue the selection until the parameter/function level is reached.
- ▶ Start a function. The will carry out the function possibly after a preparing dialogue.
- or -
Select a parameter to set. The setup possibilities are depending from the parameter type.

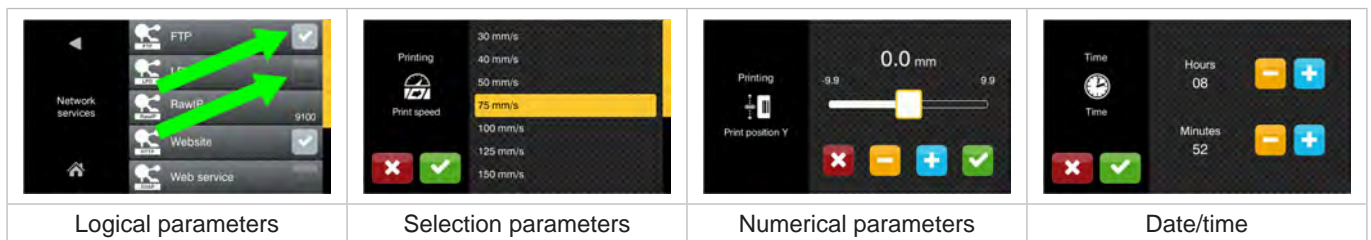


Figure 10 Samples for parameter setting








| | |
|---|---|
|  | Scroll bar for rough value setting |
|  | Decreasing the value step-by-step |
|  | Increasing the value step-by-step |
|  | Return without saving the setting |
|  | Return with saving the setting |
|  | Parameter is disabled, touching enables the parameter |
|  | Parameter is enabled, touching disables the parameter |

Table 4 Buttons for parameter setting

**Note!**

For adjustments and simple installation work, use the accompanying Allen key located in the upper section of the print unit. No other tools are required for the work described here.

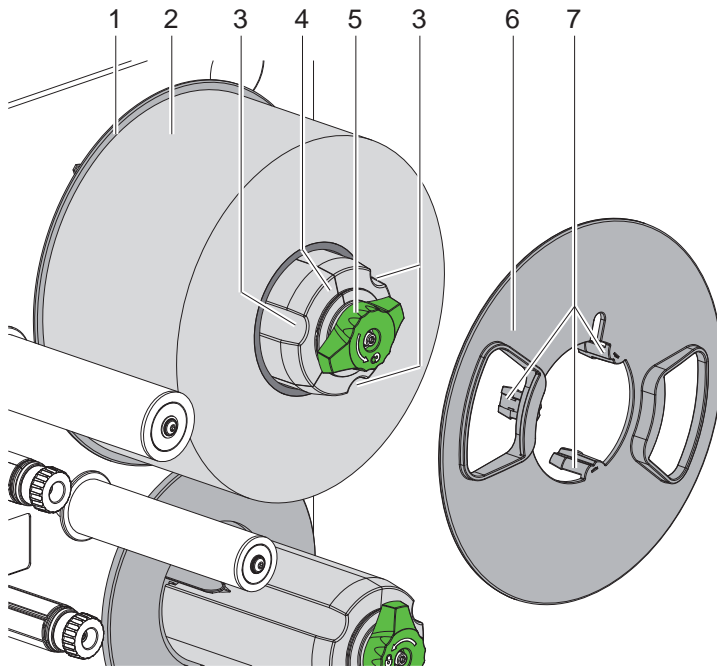
4.1 Loading Labels**4.1.1 Positioning the Media Roll on the Roll Retainer**

Figure 11 Loading label roll

1. Turn knob (5) clockwise to release the roll retainer (4).
2. Remove the margin stop (6) from the roll retainer.
3. Load label roll (2) on the roll retainer (4) in such a way, that the labels are visible from above after unrolling.
4. Slide the roll against the wall plate (1).
5. Guide the latches (7) of the margin stop (6) into the grooves (3) of the roll retainer (4) and push the margin stop against the label roll (2).
6. Turn knob (5) counterclockwise to tighten the label roll and the margin stop on the roll retainer.

4.1.2 Inserting the Labels into the Print Mechanism

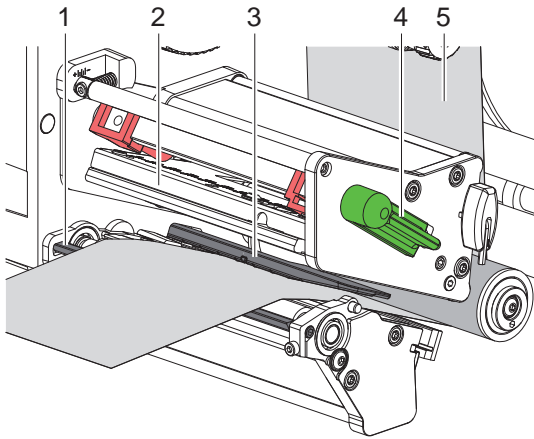


Figure 12 Inserting the labels into the print mechanism

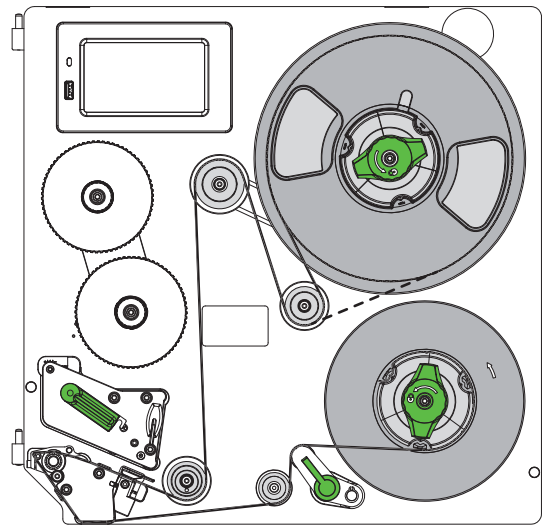


Figure 13 Label feed path

1. Turn lever (4) counterclockwise to lift the printhead (2).
2. Move the guide (6) to the outermost position by turning the spindle (7) with the Allen key (8).
3. Supply a longer label strip of approx. 100 cm.
4. Guide label strip (5) to the print unit as shown in Figure 13. The broken line shows the path for inside wound labels.
5. Guide label strip through the label sensor (3) to the peel-off edge.
6. Move the guide (6) against the label strip by turning the spindle (7).
7. Forward the label strip over the peel-off edge (1), that the strip reaches back internal rewriter. Remove the labels from the overhanging strip.

4.1.3 Setting the Label Sensor

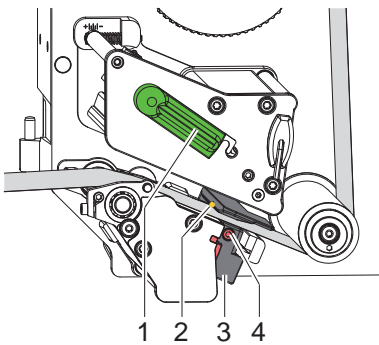


Figure 14 Setting the Label Sensor

The label sensor can be shifted perpendicular to the direction of paper flow for adaptation to the label medium. When the printer is switched on, a yellow LED illuminates the sensor position (2).

- ▶ Loosen the screw (4).
- ▶ Position the label sensor with the tab (3) in such a way that the sensor (2) can detect the label gap or a reflex or perforation mark.
- or, if the labels deviate from a rectangular shape, -
- ▶ Align the label sensor using the tab (3) with the front edge of the label in the direction of paper flow.
- ▶ Tighten the screw (4).
- ▶ Turn the lever (1) clockwise to lock the printhead.

4.1.4 Guiding the Liner to the Internal Rewinder

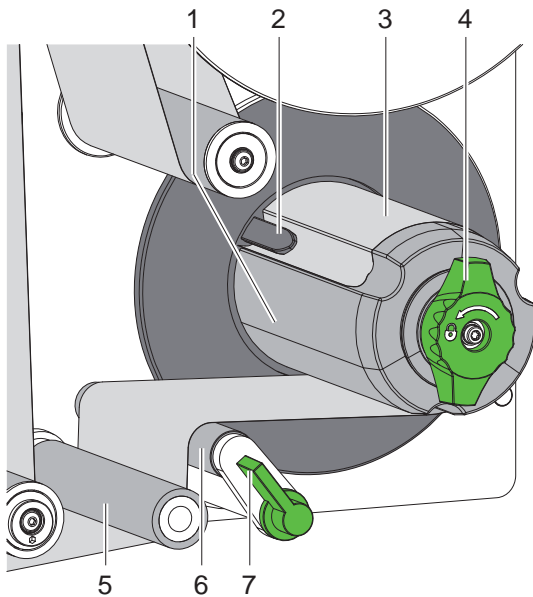


Figure 15 Guiding the liner to the internal rewriter

1. Turn the lever (7) clockwise to lift the locking system (6) from the transport roller (5).
2. Hold the rewriter (1) firmly and turn the knob (4) clockwise until it stops.
3. Guide the liner coming from the peel-off edge around the transport roller (5) and the locking system (6) to the internal rewriter (1).
4. Push the liner under a bracket (2) of the rewriter (1) and turn the knob (4) counterclockwise until it stops. The rewriter is fully spread, thus gripping the liner firmly.
5. Turn the rewriter (1) counterclockwise to tighten the liner.
6. Turn the lever (7) counterclockwise to lock the transport system (5,6).

4.2 Setting the Head Locking System

The printhead is pushed on via two plungers. The location of the outer plunger (2) must be set to the width of the label medium used so as to

- achieve even print quality across the entire label width
- prevent wrinkles in the feed path of the transfer ribbon
- prevent premature wearing of the print roller and printhead.

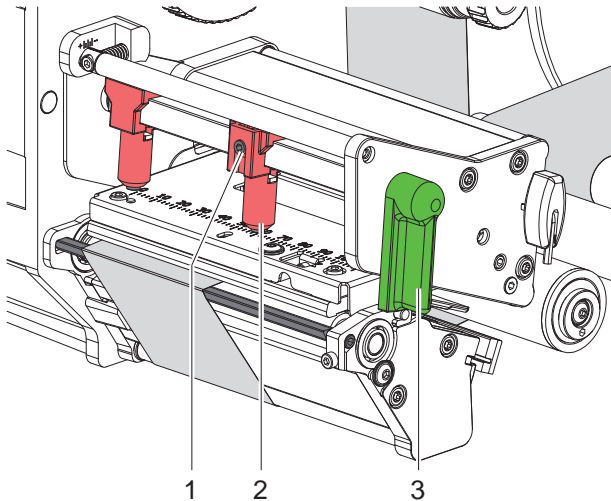


Figure 16 Setting the head locking system

1. Turn the lever (3) clockwise to lock the printhead.
2. Loosen the threaded pin (1) at the outer plunger (2) with the Allen key.
3. Align the outer plunger (2) to the outer label edge and tighten the threaded pin (1).

4.3 Setting the Peel-off Edge

When operating the printer with applicator the label must be peeled-off completely from the liner for the taking over by the applicator.

The peel-off edge can be turned to optimize especially the separation of the rear label edge from the liner.

When the printer is delivered the peel-off edge is turned in the upper end position (1a).

Depending on the used material and label size the peel-off edge can be lowered (1b).

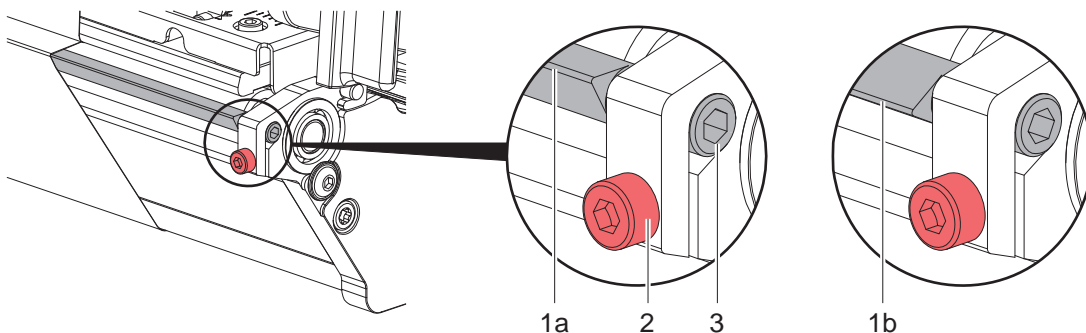


Figure 17 Setting the peel-off edge

1. Loosen the screw (2).
2. Turn the peel-off edge at the hexagon (3) as necessary
3. Tighten the screw (2).
4. Test the setting.

4.4 Loading Transfer Ribbon

**Note!**

With direct thermal printing, do not load a transfer ribbon; if one has already been loaded, remove it.

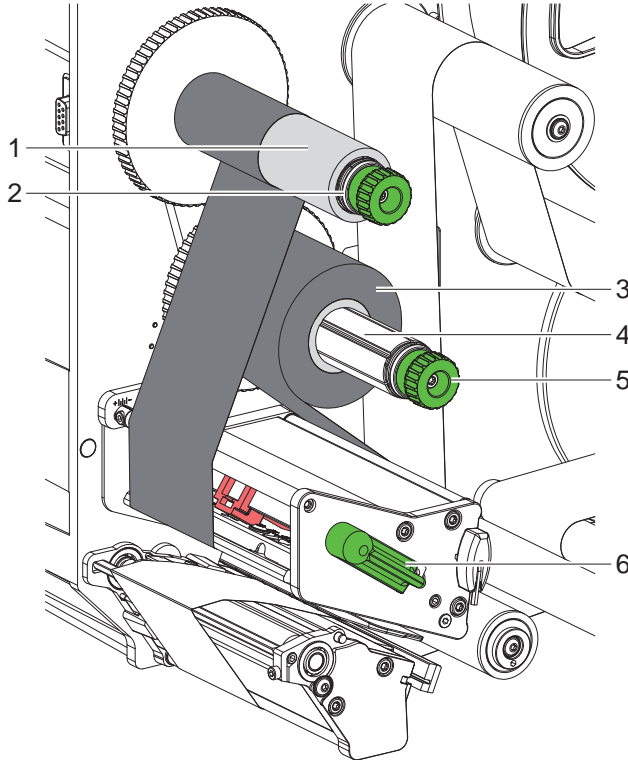


Figure 18 Loading transfer ribbon

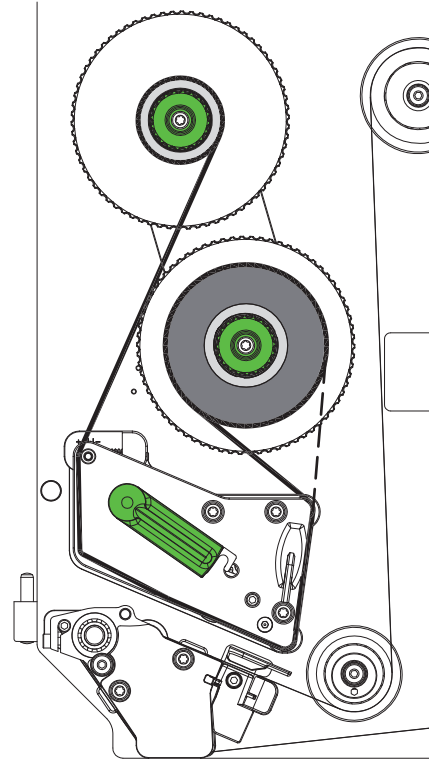


Figure 19 Transfer ribbon feed path

1. Clean printhead before loading the transfer ribbon (▷ 6.3 on page 22).
2. Turn lever (6) counterclockwise to open the printhead.
3. Slide transfer ribbon roll (3) onto the ribbon supply hub (4) until it stops and so that the color coating of the ribbon faces away from the printhead after loading.
4. Hold ribbon supply hub (4) firmly and turn knob (5) counterclockwise until the transfer ribbon roll is secured.
5. Slide suitable ribbon core (1) onto the transfer ribbon take-up hub (2) and secure it in the same way.
6. Guide transfer ribbon through the print unit as shown in Figure 19.
7. Secure starting end of transfer ribbon to the transfer ribbon core (1) with adhesive tape. Ensure counterclockwise rotation direction of the transfer ribbon take-up hub here.
8. Turn transfer ribbon take-up hub (2) counterclockwise to smooth out the feed path of the transfer ribbon.
9. Turn lever (6) clockwise to close the printhead.

4.5 Setting the Feed Path of the Transfer Ribbon

Transfer ribbon wrinkling can lead to print image errors. Transfer ribbon deflection can be adjusted so as to prevent wrinkles.

**Note!**

A maladjustment of the head locking system may also cause ribbon wrinkling

► Check first the setting of the head locking system (▷ 4.2 on page 18).

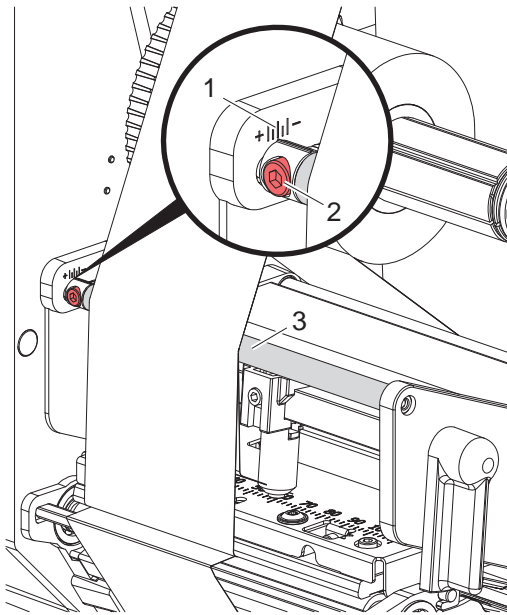


Figure 20 Setting the feed path of the transfer ribbon

**Note!**

The adjustment is best carried out during printing.

1. Read current setting on the scale (1) and record if necessary.
2. Turn screw (2) with Allen key and observe the behavior of the ribbon.
In the + direction, the inner edge of the transfer ribbon is tightened, and the outer edge is tightened in the - direction.

5.1 Printhead Protection




Attention!

Printhead damage caused by improper handling!

- ▶ Do not touch the underside of the printhead with the fingers or sharp objects.
- ▶ Ensure that the labels are clean.
- ▶ Ensure that the label surfaces are smooth. Rough labels act like emery paper and reduce the service life of the printhead.
- ▶ Print with the lowest possible printhead temperature.

5.2 Synchronization of the Paper Feed

After the label stock has been inserted, for peel-off mode a synchronization of the paper feed is required. That way the first label, which is detected by the label sensor, will be transported to the print position and all labels in front will be fed out of the printer. So the synchronization avoids, that blank labels are peeled-off together with the first printed label. This can cause useless first label.

- ▶ Press  to start the synchronization.
- ▶ Remove the blank labels peeled-off during the synchronization.



Note!

The synchronization will not be lost by switching off the printer as long as the printhead and the transport system are kept close.

5.3 Peel-off Mode

In Peel-off mode, the labels are automatically peeled off the liner after printing and presented for removal.



Attention!

- ▶ Activate the peel-off mode in the software.
This is done with the "P command" in the direct programming, ▶ Programming Manual.



Note!

The print of a label must be started by the external START or REPRINT signal (▶ Configuration Manual).
When operating the printer without cab applicator the removal of the label must be confirmed by the LBLREM signal (▶ Configuration Manual).
When a cab applicator is connected the LBLREM signal will be generated automatically.

5.4 Ribbon Saving

* At devices with automatic ribbon saving only!

If there is no information to print during a longer label feed, the printhead will be lifted, and the transfer ribbon will be paused from feeding. This will reduce the ribbon consumption. The minimum length for ribbon saving is defined in the firmware and depends on the print speed.

The ribbon saver can permanently be activated in the printer configuration (▶ Configuration Manual) or job-oriented by the software (▶ Programming Manual).

6.1 Cleaning Information



Danger!

Risk of death via electric shock!

- ▶ **Disconnect the printer from the power supply before performing any maintenance work.**

The label printer requires very little maintenance.

It is important to clean the thermal printhead regularly. This guarantees a consistently good printed image and plays a major part in preventing premature wear of the printhead.

Otherwise, the maintenance is limited to monthly cleaning of the device.



Attention!

The printer can be damaged by aggressive cleansers.

- ▶ **Do not use abrasive cleaners or solvents for cleaning the external surfaces or modules.**

- ▶ Remove dust and paper fluff from the print area with a soft brush or vacuum cleaner.
- ▶ The cover of the printer can be cleaned with a standard cleanser.

6.2 Cleaning the Print Roller

Accumulations of dirt on the print roller may impair the media transport and the print quality.

- ▶ Lift the printhead.
- ▶ Remove labels and transfer ribbon from the printer.
- ▶ Remove deposits with roller cleaner and a soft cloth.
- ▶ If the roller appears damaged, replace it ► Service Manual.

6.3 Cleaning the Printhead

Cleaning intervals:

| | |
|---------------------------|----------------------------|
| direct thermal printing | - every media roll change |
| thermal transfer printing | - every ribbon roll change |

Substances may accumulate on the printhead during printing and adversely affect printing, e.g. differences in contrast or vertical stripes.



Attention!

The printhead can be damaged!

- ▶ **Do not use sharp or hard objects to clean the printhead.**
- ▶ **Do not touch protective glass layer of the printhead.**



Attention!

Risk of injury from the hot printhead line.

- ▶ **Ensure that the printhead has cooled down before starting cleaning.**

- ▶ Lift the printhead.
- ▶ Remove labels and transfer ribbon from the printer.
- ▶ Clean printhead surface with special cleaning pen or a cotton swab dipped in pure alcohol.
- ▶ Allow printhead to dry for 2–3 minutes before commissioning the printer.

7.1 Error Display

The appearance of an error will be shown on the display:

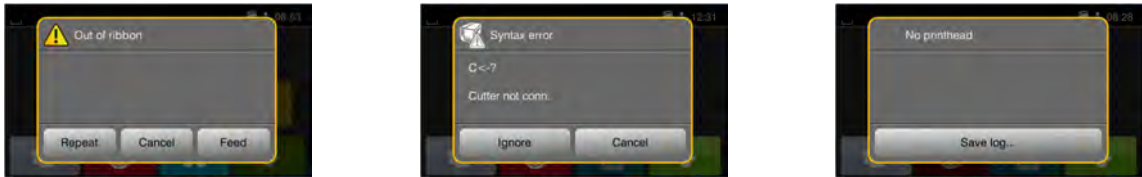


Figure 21 Error display

The error treatment is pending on the error type ▷ 7.2 on page 23.

The display offers the following possibilities to continue after an error occurred:

| | |
|-----------------|---|
| <i>Repeat</i> | The print job will be continued after clearing the error cause. |
| <i>Cancel</i> | The print job will be cancelled. |
| <i>Feed</i> | The paper feed will be synchronized. Following the print job can be continued. |
| <i>Ignore</i> | The error message will be ignored. The print job will be continued possibly with limited performance. |
| <i>Save log</i> | The error does not allow print operation. For detailed analysis several system files can be saved on an external memory. |

Table 5 Buttons in the error display

7.2 Error Messages and Fault Correction

| Error message | Cause | Remedy |
|-------------------------|--|---|
| <i>Barcode error</i> | Invalid barcode content, e.g. alphanumeric characters in a numerical barcode | Correct the barcode content. |
| <i>Barcode too big</i> | The barcode is too big for the allocated area of the label | Reduce the size of the barcode or move it. |
| <i>Buffer overflow</i> | The input buffer memory is full and the computer is still transmitting data. | Use data transmission via protocol (preferably RTS/CTS). |
| <i>Device not conn.</i> | Programming addresses a non-existent device | Either connect this device or correct the programming. |
| <i>File not found</i> | Requested file is not on the card | Check the contents of the card. |
| <i>Font not found</i> | Error with the selected download font | Cancel current print job, change font. |
| <i>Memory overflow</i> | Current print job contains too much information, e.g. selected font, large graphics | Cancel current print job. Reduce amount of data to be printed. |
| <i>Name exists</i> | Duplicate usage of field name in the direct programming | Correct programming |
| <i>No label found</i> | There are labels missing on the label material | Press <i>Repeat</i> repeatedly until printer recognizes the next label on the material. |
| | The label format as set in the software does not correspond with the real label format | Cancel current print job. Change the label format set in the software. Restart print job. |
| <i>No label size</i> | The size of the label is not defined in the programming. | Check programming. |
| <i>Out of paper</i> | Out of label roll | Load labels. |
| | Error in the paper feed | Check paper feed. |

| Error message | Cause | Remedy |
|--------------------------|---|---|
| <i>Out of ribbon</i> | Out of transfer ribbon | Insert new transfer ribbon. |
| | Transfer ribbon melted during printing | Cancel current print job. Change the heat level via software. Clean the printhead ▷ 6.3 on page 22 Load transfer ribbon. Restart print job. |
| | The printer is loaded with thermal labels, but the software is set to transfer printing | Cancel current print job. Set software to direct thermal printing. Restart print job. |
| <i>Pinch roller open</i> | The transport system is not locked | Swing the pinch roller against the transport roller. |
| <i>Printhead open</i> | Printhead not locked | Lock printhead. |
| <i>Printhead too hot</i> | Printhead is overheated | After pausing the print job will be continued automatically. If the fault recurs repeatedly, reduce the heat level or the print speed via software. |
| <i>Read error</i> | Read error when reading from the memory card | Check data of the card. Backup data, reformat card. |
| <i>Remove ribbon</i> | Transfer ribbon is loaded although the printer is set to direct thermal printing | for direct thermal printing remove ribbon |
| | | for thermal transfer printing set the printer in the configuration or in the software to transfer printing |
| <i>Ribbon ink side</i> | Identified ribbon unwinding direction does not match to the setup setting | Ribbon loaded incorrectly. Clean the printhead ▷ 6.3 on page 22 Load the ribbon correctly. |
| | | Setting does not match to the used ribbon. Correct the setting. |
| <i>Syntax error</i> | Printer has received an unknown or invalid command from the computer. | Press <i>Ignore</i> to skip the command or press <i>Cancel</i> to cancel the print job. |
| <i>Unknown card</i> | Card not formatted, Type of card not supported | Format card, use different type of card. |
| <i>Voltage error</i> | Hardware error | Switch the printer off and then on. If error recurs call service. It is shown which voltage has failed. Please note. |
| <i>Write error</i> | Hardware error | Repeat the write process, reformat card. |

Table 6 Error Messages and Fault Correction

7.3 Problem Solution

| Problem | Cause | Remedy |
|---|---|---|
| Transfer ribbon creases | Transfer ribbon deflection not adjusted | Adjust the transfer ribbon deflection. ▷ 4.5 on page 20 |
| | Head locking system not adjusted | Adjust the head locking system. ▷ 4.2 on page 18 |
| | Transfer ribbon too wide | Use a transfer ribbon slightly wider than the width of label. |
| Print image has smears or voids | Printhead is dirty | Clean the printhead ▷ 6.3 on page 22 |
| | Temperature too high | Decrease temperature via software. |
| | Unsuitable combination of labels and transfer ribbon | Use different type of ribbon. |
| Printer does not stop after transfer ribbon runs out | Thermal printing is chosen in the software | Change to thermal transfer printing. |
| Printer prints a sequence of characters instead of the label format | Printer is in ASCII dump mode | Cancel the ASCII dump mode. |
| Printer transports label media, but transfer ribbon does not move | Transfer ribbon incorrectly inserted. | Check and, if necessary, correct the transfer ribbon web and the orientation of the label side. |
| | Unsuitable combination of labels and transfer ribbon | Use different type of ribbon. |
| Printer only prints each second label | Setting of the size in the software is too large. | Change the size in the software. |
| Vertical white lines in the print image | Printhead is dirty | Clean the printhead ▷ 6.3 on page 22 |
| | Printhead is defective (failure of heat elements) | Change the printhead. ▷ Service Manual. |
| Horizontal white lines in the print image | Printer is used with the <i>backfeed > smart</i> in the cut or peel-off mode | Set the <i>backfeed > always</i> in the setup. ▷ Configuration Manual. |
| Print image is irregular, one side is lighter | Printhead is dirty | Clean the printhead ▷ 6.3 on page 22 |
| | Head locking system not adjusted | Adjust the head locking system. ▷ 4.2 on page 18 |

Table 7 Problem solution

8.1 Label Dimensions

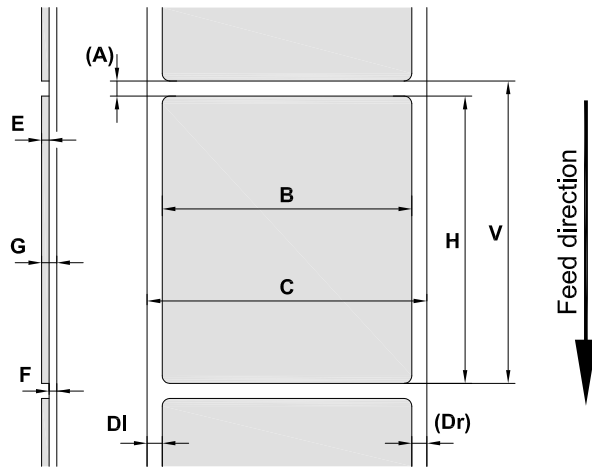


Figure 22 Label dimensions

| Dim. | Designation | Dim. in mm | | | |
|------|--|------------|-------------|-------------|-------------|
| | | HERMES Q2 | HERMES Q4 | HERMES Q4.3 | HERMES Q6.3 |
| B | Label width | 4 - 58 | 20 - 114 | | 46 - 174 |
| H | Label height | 3 - 200 | 4 - 320 | | 6 - 320 |
| A | Label distance | | > 2 | | |
| C | Width of liner | 24 - 62 | 24 - 118 | | 46 - 178 |
| DI | Left margin | | ≥ 0 | | |
| Dr | Right margin | | ≥ 0 | | |
| E | Label thickness | | 0,03 - 0,60 | | |
| F | Liner thickness | | 0,03 - 0,16 | | |
| G | Thickness label with liner | | 0,06 - 0,76 | | |
| V | Label feed | > 5 | > 6 | | > 8 |
| | <ul style="list-style-type: none"> Small label sizes, thin materials or strong glue can lead to limitations. Critical applications need to be tested and cleared. | | | | |

Table 8 Label dimensions

8.2 Device Dimensions

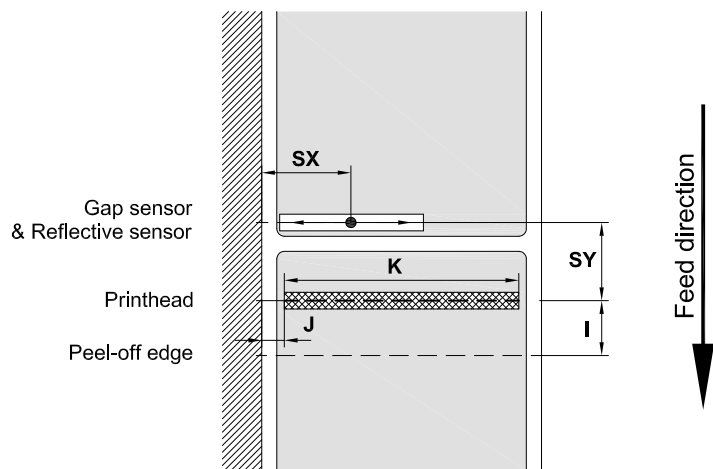


Figure 23 Device dimensions

| Dim. | Designation | Dim. in mm | | | | | | | | |
|------|---|------------|------|-----------|-------|-------------|-------|-------------|-------|-----|
| | | HERMES Q2 | | HERMES Q4 | | HERMES Q4.3 | | HERMES Q6.3 | | |
| | | L | R | L | R | L | R | L | R | |
| I | Distance printhead - peel-off edge | 15 | | | | | | | | |
| J | Distance 1st heating point - material edge | | | | | | | | | |
| | without ribbon saver | 203 dpi | - | - | - | - | 1,0 | 1,0 | 1,0 | 1,0 |
| | | 300 dpi | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 1,0 |
| | | 600 dpi | 1,0 | 1,0 | 1,0 | 1,0 | - | - | - | - |
| | with ribbon saver | 203 dpi | - | - | - | - | 2,2 | 1,6 | 0,2 | 0,2 |
| | | 300 dpi | - | - | 1,0 | 1,0 | 0,0 | -0,7 | 2,9 | 2,9 |
| | | 600 dpi | - | - | 1,0 | 1,0 | - | - | - | - |
| K | Print width | 203 dpi | - | | - | | 104,0 | | 168,0 | |
| | | 300 dpi | 56,9 | | 105,7 | | 108,4 | | 162,6 | |
| | | 600 dpi | 54,1 | | 105,7 | | - | | - | |
| SX | Distance gap/reflective sensor - material edge i.e. permissible distance of reflex or cut-out marks to the material edge | 2 - 26 | | 2 - 60 | | | | | | |
| SY | Distance gap/reflective sensor - printhead | 62,5 | | | | | | | | |

Table 9 Device dimensions

8.3 Reflex Mark Dimensions

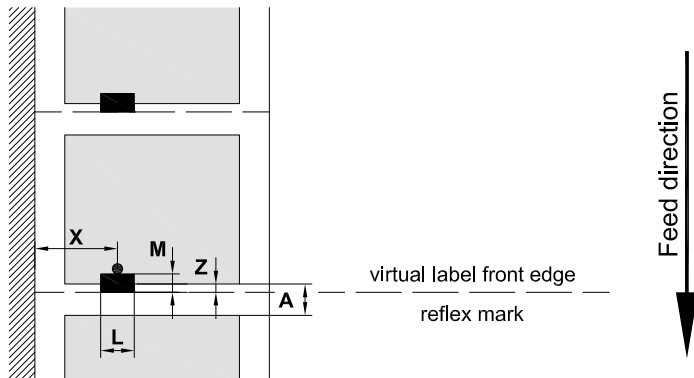
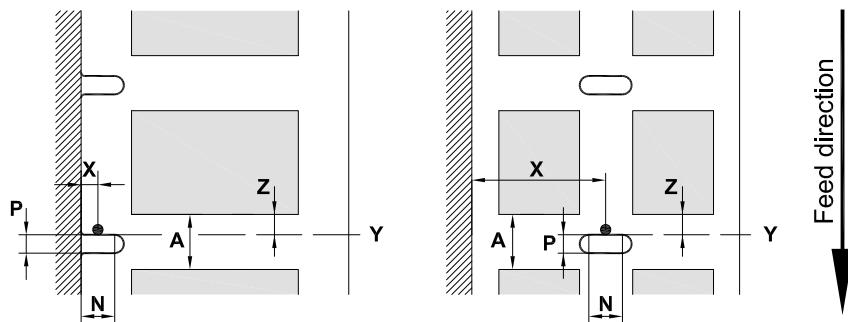


Figure 24 Reflex mark dimensions

| Dim. | Designation | Dim. in mm | |
|------|---|-------------------------|-------------------------|
| | | HERMES Q2 | HERMES Q4 / Q4.3 / Q6.3 |
| A | Label distance | > 2 | |
| L | Width of reflex mark | > 5 | |
| M | Height of reflex mark | 3 - 10 | |
| X | Distance mark - material edge | 2 - 26 | 2 - 60 |
| Z | Distance virtual label front edge - actual label front edge ► Adjust software settings | 0 up to A / recomm. : 0 | |
| | <ul style="list-style-type: none">Reflex marks must be on the back side of the material (liner).Label sensor for reflex marks on the top side on request.Specification is valid for black marks.Recognition of colored marks may fail. ► Preliminary tests are needed. | | |

Table 10 Reflex mark dimensions

8.4 Cut-out Mark Dimensions



for marginal cut-out marks

minimum liner thickness 0,06 mm

Figure 25 Cut-out mark dimensions

| Dim. | Designation | Dim. in mm | |
|------|---|-------------------|-------------------------|
| | | HERMES Q2 | HERMES Q4 / Q4.3 / Q6.3 |
| A | Label distance | > 2 | |
| N | Width of cut-out mark for marginal cut-out | > 5 | |
| | | > 8 | |
| P | Height of cut-out mark | 2 - 10 | |
| X | Distance mark - material edge | 2 - 26 | 2 - 60 |
| Y | Sensor recognized virtual label front edge with gap sensor recognition | Rear edge cut-out | |
| Z | Distance recognized front edge - actual label front edge ► Adjust software settings | 0 up to A-P | |

Table 11 Cut-out mark dimensions

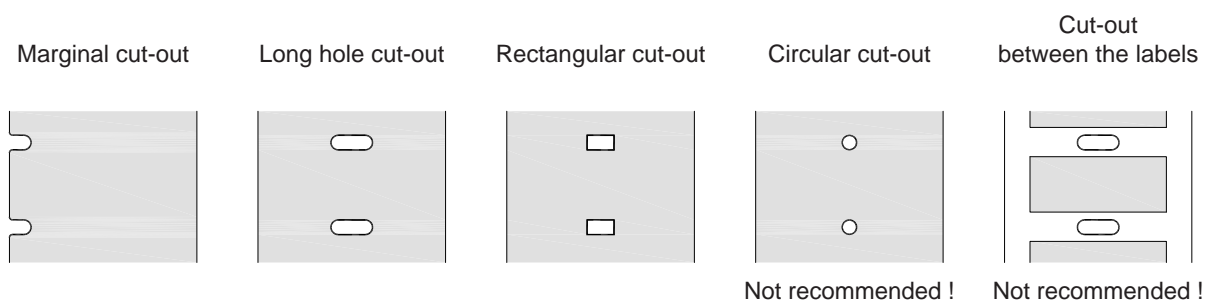


Figure 26 Samples for cut-out marks

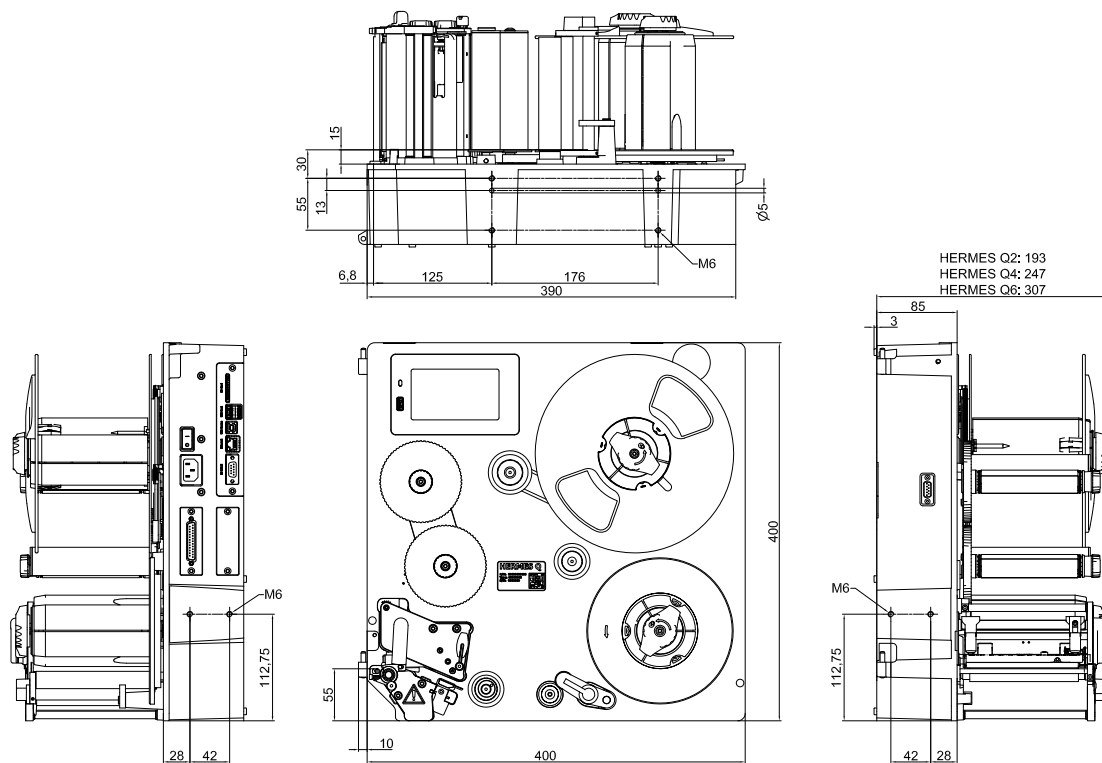


Figure 27 Assembly dimensions HERMES Q-2

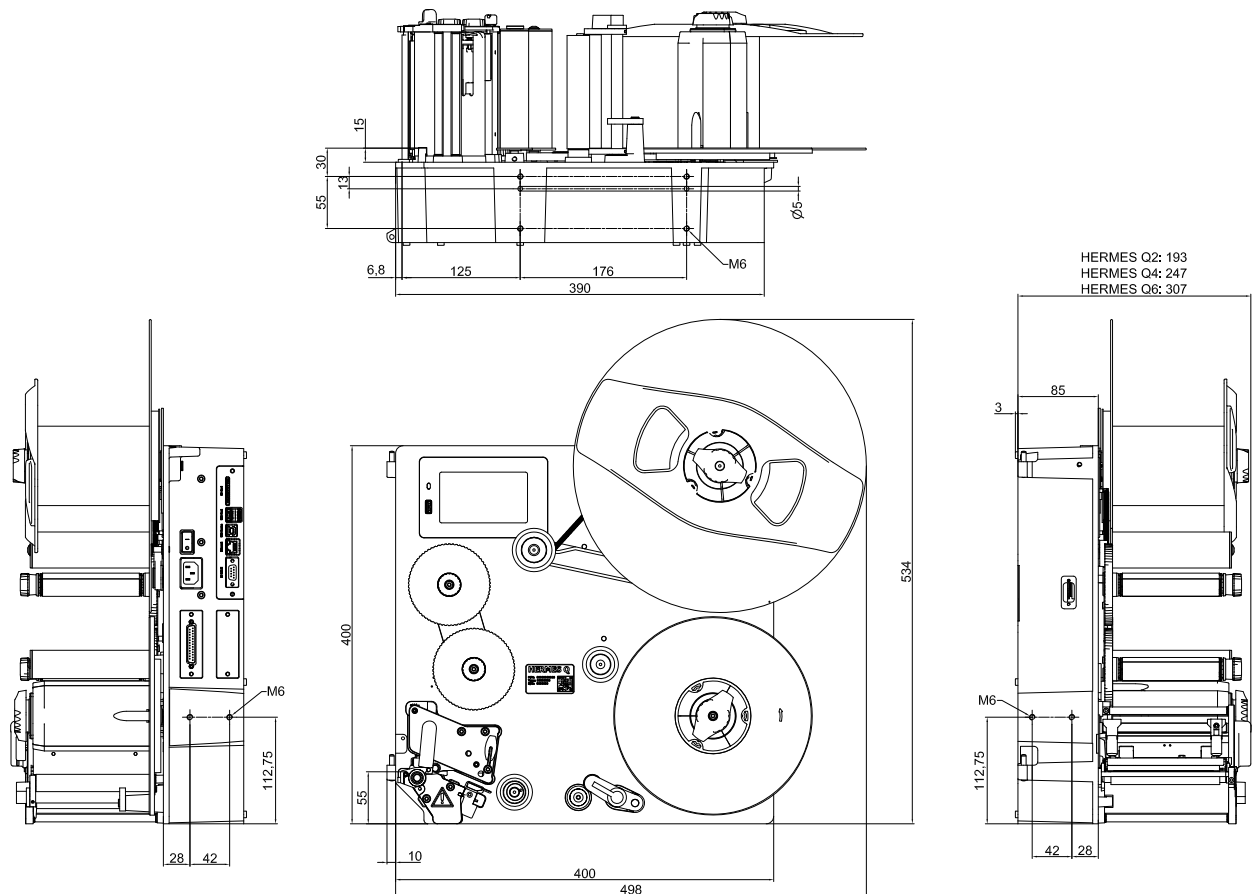


Figure 28 Assembly dimensions HERMES Q-3

10.1 Declaration of Incorporation




Declaration of Incorporation

We declare herewith that the following „partly completed machinery“ as a result of design, construction and the version put in circulation complies with the essential requirements of the **Directive 2006/42/EC on machinery** :

Annex I, Article 1.1.2, 1.1.3, 1.1.5, 1.1.6, 1.2.1, 1.2.4.1, 1.3.2, 1.5.1, 1.5.2, 1.5.8, 1.6.3, 1.7

In the event of any alteration which has not been approved by us being made to any device as designated below, this statement shall thereby be made invalid.

| | |
|---|---|
| Device: | Label Printer |
| Type: | HERMES Q |
| Applied EU Regulations: | Applied Standards: |
| Directive 2006/42/EC on machinery | <ul style="list-style-type: none"> • EN ISO 12100:2010 • EN ISO 13857:2008 • EN 349:1993+A1:2008 • EN ISO 13849-1:2015 • EN 62368-1: 2014+AC:2015 |
| Other Relevant Directives: | |
| <ul style="list-style-type: none"> • Directive 2014/30/EU relating to electromagnetic compatibility • Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment | |
| Person authorised to compile the technical file : | Erwin Fascher Am Unterwege 18/20 99610 Sömmerda |
| Signed for, and on behalf of the Manufacturer : | Sömmerda, 22.10.2019  Erwin Fascher Managing Director |
| cab Produkttechnik Sömmerda Gesellschaft für Computer- und Automationsbausteine mbH 99610 Sömmerda | |

The product must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of the Directive on machinery


The documents according annex VII part B from the incomplete machinery are created and will commit to state agencies on request in electronic kinds.

10.2 EU Declaration of Conformity



EU Declaration of Conformity

We declare herewith that the following device as a result of design, construction and the version put in circulation complies with the relevant fundamental regulations of the EU Rules for Safety and Health. In the event of any alteration which has not been approved by us being made to any device as designated below, this statement shall thereby be made invalid.

| | |
|--|---|
| Device: | Label Printer |
| Type: | HERMES Q |
| Applied EU Regulations: | Applied Standards: |
| Directive 2014/30/EU relating to electromagnetic compatibility | <ul style="list-style-type: none"> • EN 55024:2010 • EN 55032:2012 • EN 61000-3-2:2014 • EN 61000-3-3:2013 • EN 61000-6-2:2005 |
| Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment | <ul style="list-style-type: none"> • EN 50581:2012 |
| Commission delegated directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council as regards the list of restricted substances | |
| Signed for, and on behalf of the Manufacturer : | Sömmerda, 22.10.2019 |
| cab Produkttechnik Sömmerda Gesellschaft für Computer- und Automationsbausteine mbH 99610 Sömmerda |  Erwin Fascher Managing Director |

10.3 FCC

NOTE : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment generates, uses, and can radiate radio frequency and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user may be required to correct the interference at his own expense.

A

Assembly dimensions.....30

C

Cleaning

printhead.....22

print roller.....22

Cleaning information.....22

Contents of delivery.....10

Control panel.....8

Cut-out marks.....29

D

Declaration of conformity.....32

Declaration of incorporation.....31

Device dimensions.....27

Device overview.....7

E

Environment.....5

Errors

correction.....23

messages.....23

types.....23

F

FCC.....32

H

Head locking system, setting.....18

I

Important information.....4

Intended use.....4

L

Label sensor, setting.....16

License.....2

Lithium battery.....6

Loading labels.....15

Loading transfer ribbon.....19

P

Peel-off mode.....21

Power supply.....5

Printhead

cleaning.....22

damage.....21

Print roller, cleaning.....22

Problem solution.....25

R

Reflex marks.....28

Ribbon saving.....21

S

Safety instructions.....5

Safety marking.....6

Service work.....5

Setting-up.....10

Supply voltage.....11

Switching on.....11

Synchronization of the paper feed....21

T

Touchscreen display.....12

U

Unpacking.....10

V

Voltage.....5

W

Warning stickers.....5