

Assembly Instructions



Label Printer

HERMES Q

2 Assembly Instructions

for the following products

Family	Туре
HERMES Q	HERMES Q2L
	HERMES Q4L
	HERMES Q4.3L
	HERMES Q6.3L
	HERMES Q2R
	HERMES Q4R
	HERMES Q4.3R
	HERMES Q6.3R

Edition: 07/2024 - 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 <u>www.cab.de</u>

France **cab Technologies S.à.r.l.** Niedermodern Phone +33 388 722501 <u>www.cab.de/fr</u> USA cab Technology, Inc. Chelmsford, MA Phone +1 978 250 8321 www.cab.de/us

Mexico **cab Technology, Inc.** Juárez Phone +52 656 682 4301 <u>www.cab.de/es</u> Taiwan **cab Technology Co., Ltd.** Taipei Phone +886 (02) 8227 3966

www.cab.de/tw

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

Singapore **Pte. Ltd.**Singapore Phone +65 6931 9099
www.cab.de/en

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

Table of Contents

1	Introduction	4
1.1	Instructions	4
1.2	Intended Use	
1.3	Safety Instructions	5
1.4	Safety Marking	6
1.5	Environment	6
_		_
2	Installation	
2.1	Device Overview	
2.2	Unpacking and Setting-up the Printer	
2.3	Connecting the Device	
2.3.1	Connecting to the Power Supply	
2.3.2	Connecting to a Computer or Computer Network	
2.4	Switching on the Device	.11
3	Touchscreen Display	12
3.1	Start Screen	
3.1	Navigation in the Menu	
3.2	Navigation in the Menu	14
4	Loading Material	15
4.1	Loading Labels	
4.1.1	Positioning the Media Roll on the Roll Retainer	
4.1.2	Inserting the Labels into the Print Mechanism	
4.1.3	Setting the Label Sensor	
4.1.4	Guiding the Liner to the Internal Rewinder	
4.2	Setting the Head Locking System	
4.3	Setting the Peel-off Edge	
4.4	Loading Transfer Ribbon	
4.5	Setting the Feed Path of the Transfer Ribbon	
		_
5	Printing Operation	
5.1	Printhead Protection	21
5.1 5.2	Printhead Protection	21 21
5.1 5.2 5.3	Printhead Protection	21 21 21
5.1 5.2	Printhead Protection	21 21 21
5.1 5.2 5.3 5.4	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving	21 21 21 21
5.1 5.2 5.3 5.4	Printhead Protection	21 21 21 21
5.1 5.2 5.3 5.4 6 6.1	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information	21 21 21 21 22
5.1 5.2 5.3 5.4 6 6.1 6.2	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller	21 21 21 21 22 22
5.1 5.2 5.3 5.4 6 6.1	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information	21 21 21 21 22 22
5.1 5.2 5.3 5.4 6 6.1 6.2	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller	21 21 21 22 22 22 22
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Printhead Fault Correction	21 21 21 22 22 22 23
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Printhead Fault Correction Error Display	21 21 21 22 22 22 23 23
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Printhead Fault Correction	21 21 21 22 22 22 23 23 23
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Print Roller Cleaning the Printhead Fault Correction Error Display Error Messages and Fault Correction Problem Solution	21 21 21 22 22 22 23 23 25
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Printhead Fault Correction Error Display Error Messages and Fault Correction Problem Solution	21 21 21 22 22 22 23 23 25 26
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Print Roller Cleaning the Printhead Fault Correction Error Display Error Messages and Fault Correction Problem Solution	21 21 21 22 22 22 23 23 25 26
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Printhead Fault Correction Error Display Error Messages and Fault Correction Problem Solution Labels Label Dimensions Device Dimensions	21 21 21 22 22 22 23 23 25 26 26 27
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2 8.3	Printhead Protection. Synchronization of the Paper Feed. Peel-off Mode. Ribbon Saving. Cleaning	21 21 21 22 22 22 23 23 25 26 27 28
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Printhead Fault Correction Error Display Error Messages and Fault Correction Problem Solution Labels Label Dimensions Device Dimensions	21 21 21 22 22 22 23 23 25 26 27 28
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2 8.3	Printhead Protection. Synchronization of the Paper Feed. Peel-off Mode. Ribbon Saving. Cleaning	21 21 21 22 22 22 23 23 25 26 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2 8.3 8.4	Printhead Protection Synchronization of the Paper Feed. Peel-off Mode. Ribbon Saving. Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Printhead. Fault Correction Error Display Error Messages and Fault Correction Problem Solution. Labels Label Dimensions Device Dimensions Reflex Mark Dimensions Cut-out Mark Dimensions Assembly Dimensions.	21 21 21 22 22 22 23 23 25 26 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2 8.3 8.4 9	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving Cleaning Cleaning Information Cleaning the Print Roller Cleaning the Printhead. Fault Correction Error Display Error Messages and Fault Correction Problem Solution Labels Label Dimensions Device Dimensions Reflex Mark Dimensions Cut-out Mark Dimensions Assembly Dimensions Licenses	21 21 21 22 22 22 23 25 26 27 28 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2 8.3 8.4 9	Printhead Protection. Synchronization of the Paper Feed. Peel-off Mode	21 21 21 22 22 22 23 23 25 26 26 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2 8.3 8.4 9 10 10.1 10.2	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving. Cleaning. Cleaning Information Cleaning the Print Roller Cleaning the Printhead. Fault Correction Error Display Error Messages and Fault Correction Problem Solution Labels Label Dimensions Device Dimensions Reflex Mark Dimensions Cut-out Mark Dimensions Licenses Declaration of Incorporation EU Declaration of Conformity.	21 21 21 22 22 22 23 23 24 26 27 28 29 30 31 31 32 32
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2 8.3 8.4 9	Printhead Protection. Synchronization of the Paper Feed. Peel-off Mode	21 21 21 22 22 22 23 23 24 26 27 28 29 30 31 31 32 32
5.1 5.2 5.3 5.4 6 6.1 6.2 6.3 7 7.1 7.2 7.3 8 8.1 8.2 8.3 8.4 9 10 10.1 10.2	Printhead Protection Synchronization of the Paper Feed Peel-off Mode Ribbon Saving. Cleaning. Cleaning Information Cleaning the Print Roller Cleaning the Printhead. Fault Correction Error Display Error Messages and Fault Correction Problem Solution Labels Label Dimensions Device Dimensions Reflex Mark Dimensions Cut-out Mark Dimensions Licenses Declaration of Incorporation EU Declaration of Conformity.	21 21 21 22 22 22 23 23 24 26 27 28 29 30 31 31 32 32

4 1 Introduction

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 how to make work easier or an important step to be carried out.



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 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 standards 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.

1 Introduction

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 LpA 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.

6 1 Introduction 6

1.4 Safety Marking

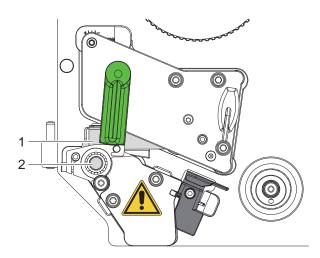


Figure 1 Safety marking



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

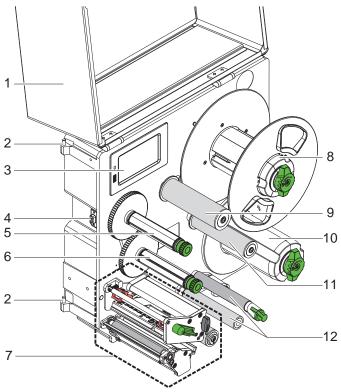


Figure 2 Overview HERMES Q-2

- - 1 Cover (Option)
 - 2 Hinges for cab-applicators
 - 3 Control panel
 - 4 Interface for cab-applicators
 - 5 Ribbon take-up hub
 - 6 Ribbon supply hub
 - 7 Print mechanism
 - 8 Roll retainer
 - 9 Pivot arm with guide roller
 - 10 Internal rewinder
 - 11 Guide roller
 - 12 Transport system

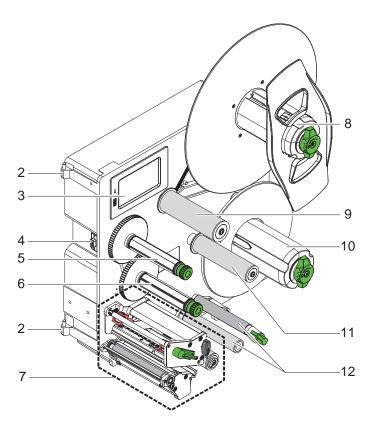


Figure 3 Overview HERMES Q-3

- 2 Hinges for cab-applicators
- 3 Control panel
- 4 Interface for cab-applicators
- 5 Ribbon take-up hub
- 6 Ribbon supply hub
- 7 Print mechanism
- 8 Roll retainer
- 9 Pivot arm with guide roller
- 10 Internal rewinder
- 11 Guide roller
- 12 Transport system

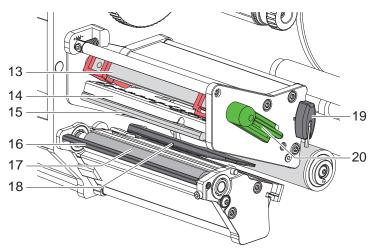


Figure 4 Print mechanism

- 13 Head locking system14 Printhead retainer
- 15 Printhead
- 16 Peel-off edge
- 17 Print roller
- 18 Label sensor
- 19 Allen key20 Printhead locking lever

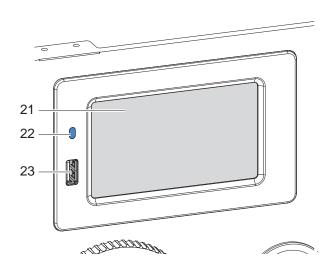


Figure 5 Control panel

- 21 Touchscreen display
- 22 LED Power ON
- 23 USB host interface for USB memory stick or service key

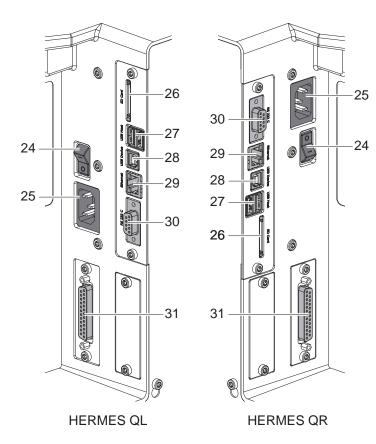


Figure 6 Connections

- 24 Power switch
- 25 Power connection jack
- 26 Slot for SD card
- 27 2 USB host interfaces for service key, USB memory stick, keyboard, barcode scanner, WiFi adapter, external control panel or warning light
- 28 USB Hi-speed device interface
- 29 Ethernet 10/100 Base-T
- 30 Serial RS-232 C interface
- 31 I/O interface

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



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.

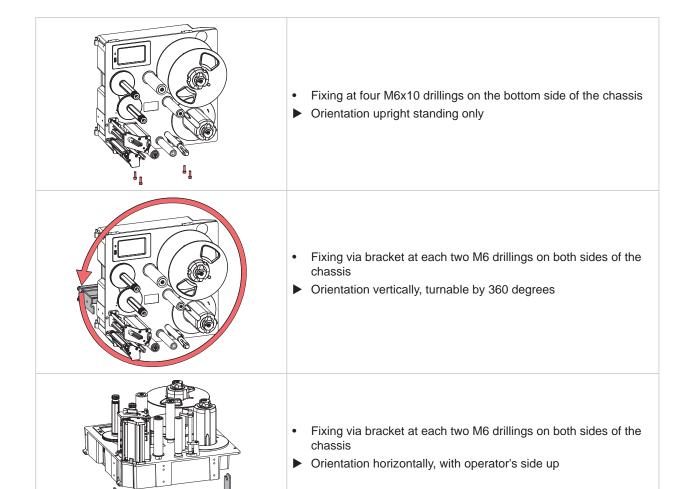


Table 1 Permitted mounting orientations

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 $230 \text{ V}_{-}/50 \text{ Hz}$ or $115 \text{ V}_{-}/60 \text{ Hz}$ 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 \triangleright 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).

12 3 Touchscreen Display

The user can control the operation of the printer with the touchscreen display, 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. \triangleright 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

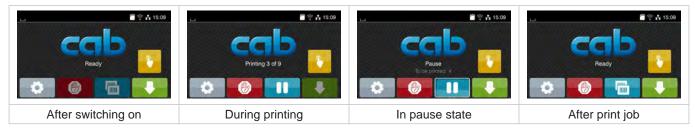


Figure 7 Start screen

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.

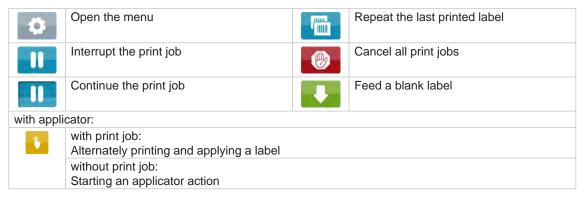


Table 2 Symbols on the start screen



Note!

Inactive symbols are shaded.

3 Touchscreen Display

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



Figure 8 Widgets in the start screen

<u>•</u>	Displays the current data transfer in the form of a falling drop.
•	The Save data stream 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
<u></u>	WiFi connection active The WiFi strength is displayed by the number of white arcs.
#	Ethernet connection active
-Ļ	USB connection active
abc	abc program active
15:14	Clock time

Table 3 Widgets in the start screen

14 3 Touchscreen Display

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 function may only start after a preparatory dialog.
 or -

Select a parameter to set. The setup possibilities are depending from the parameter type.

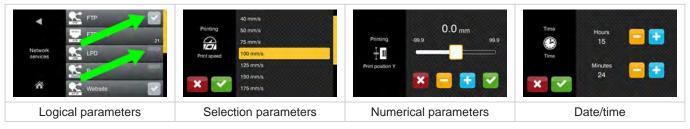


Figure 10 Samples for parameter setting

	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
100	Parameter is disabled, touching enables the parameter
~	Parameter is enabled, touching disables the parameter

Table 4 Buttons for parameter setting

4 Loading Material 15



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

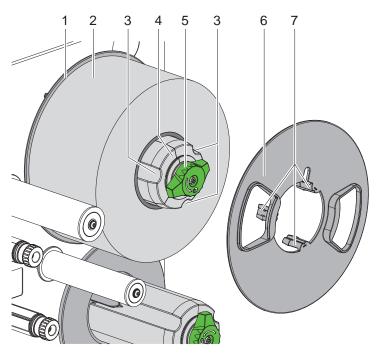
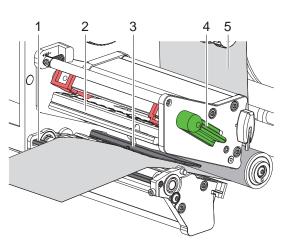


Figure 11 Loading label roll

- 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.

16 4 Loading Material 16

4.1.2 Inserting the Labels into the Print Mechanism



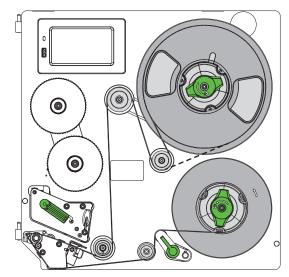


Figure 12 Inserting the labels into the print mechanism

Figure 13 Label feed path

- 1. Turn lever (4) counterclockwise to lift the printhead (2).
- 2. Supply a longer label strip of approx. 100 cm.
- 3. Guide label strip (5) to the print unit as shown in Figure 13. The broken line shows the path for inside wound labels.
- 4. Guide label strip through the label sensor (3) to the peel-off edge.
- 5. Forward the label strip over the peel-off edge (1), that the strip reaches back internal rewinder. Remove the labels from the overhanging strip.

4.1.3 Setting the Label Sensor

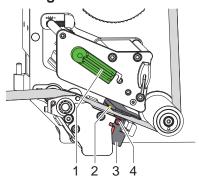


Figure 14 Setting the Label Sensor

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 Loading Material 17

4.1.4 Guiding the Liner to the Internal Rewinder

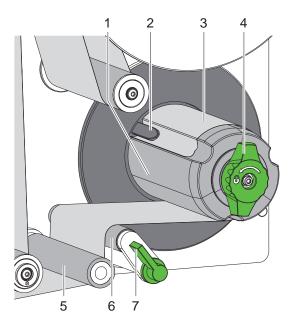


Figure 15 Guiding the liner to the internal rewinder

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

18 4 Loading Material 18

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.

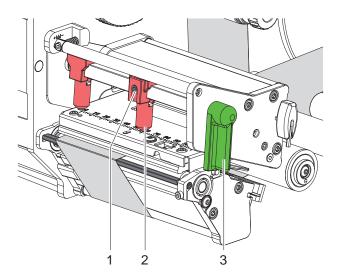


Figure 16 Setting the head locking system

- 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).

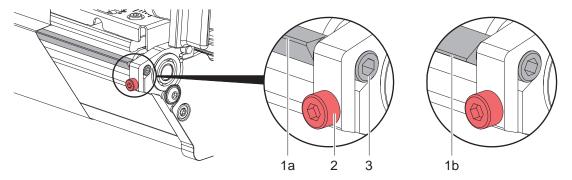


Figure 17 Setting the peel-off edge

- 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 Loading Material 19

4.4 Loading Transfer Ribbon



Note!

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

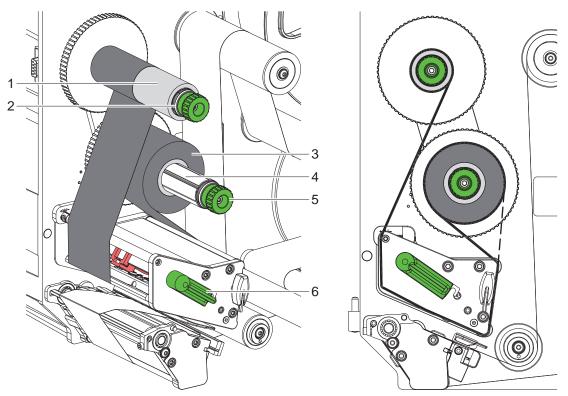


Figure 18 Loading transfer ribbon

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.

20 4 Loading Material 20

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).

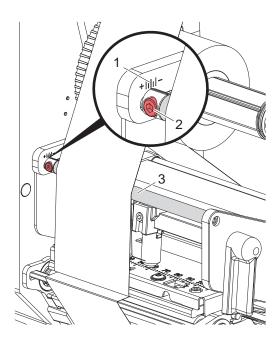


Figure 20 Setting the feed path of the transfer ribbon



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 Printing Operation

5.1 Printhead Protection



Attention!

Printhead damage caused by improper handling!

- ▶ Do not touch the underside of the printhead with fingers or sharp objects.
- ▶ Ensure that the labels are clean.
- ▶ Ensure that the label surfaces are smooth. Rough labels may 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 (\triangleright Configuration Manual) or job-oriented by the software (\triangleright Programming Manual).

22 6 Cleaning 22

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.

Recommended Cleaners	
Print and rewind guide roller	Roller cleaner WR1 (Part No. 9200051)
Printhead and label sensor	Isopropanol > 99,9%
Other surfaces	Isopropanol 70-100%

Table 5 Recommended cleaners

▶ Remove dust and paper fluff from the print area with a soft brush or vacuum cleaner.

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 WR1 and a soft cloth.
- ▶ Wait 2–3 minutes before commissioning the printer.
- ▶ 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!

Printhead can be damaged!

Do not use sharp or hard objects to clean the printhead.

Do not touch protective glass layer of the printhead.

1

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 a cotton swab or a soft cloth soaked in >99% isopropanol.
- ▶ Allow printhead to dry for 2–3 minutes before resuming printing.

7 Fault Correction 23

7.1 Error Display

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





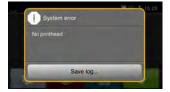


Figure 21 Error display

The error correction depends on the error type \triangleright 7.2 on page 23.

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

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

Table 6 Buttons in the error display

7.2 Error Messages and Fault Correction

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

7 Fault Correction 24

Error message	Cause	Remedy		
Out of ribbon	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 direct thermal label material, but the software is set to transfer printing	Cancel current print job. Set software to direct thermal printing. Restart print job.		
Pinch roller open	The transport system is not locked	Swing the pinch roller against the transport roller.		
Printhead open	Printhead not locked	Lock printhead.		
Printhead too hot	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.		
Read error	Read error when reading from the memory card	Check data of the card. Backup data, reformat card.		
Remove ribbon	Transfer ribbon is loaded although the	for direct thermal printing remove ribbon		
	printer is set to direct thermal printing	for thermal transfer printing set the printer in the configuration or in the software to transfer printing		
Ribbon ink side	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.		
Syntax error	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.		
Unknown card	Card not formatted, Type of card not supported	Format card, use different type of card.		
Voltage error	Hardware error	Switch the printer off and then on. If error recurs call service. It is shown which voltage has failed. Please note.		
Write error	Hardware error	Repeat the write process, reformat card.		

Table 7 Error Messages and Fault Correction

7 Fault Correction 25

7.3 Problem Solution

Problem	Cause	Remedy		
Transfer ribbon creases	Transfer ribbon deflection not adjusted	Adjust the transfer ribbon deflection.		
	Head locking system not adjusted	Adjust the head locking system.		
	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		
	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		
	Printhead is defective (failure of heat elements)	Change the printhead. ▷ Service Manual.		
Horizontal white lines in the print image	Printer is used with the backfeed > smart in the cut or peel-off mode	Set the backfeed > always in the setup. ▷ Configuration Manual.		
Print image is irregular, one side is lighter	Printhead is dirty	Clean the printhead		
	Head locking system not adjusted	Adjust the head locking system.		

Table 8 Problem solution

26 8 Labels 26

8.1 Label Dimensions

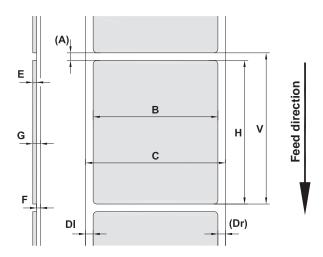


Figure 22 Label dimensions

Dim.	Designation	Dim. in mm					
		HERMES Q2	HERMES Q4	HERMES Q4.3	HERMES Q6.3		
В	Label width	4 - 58	20 -	114	46 - 174		
Н	Label height	3 - 200	00 4 - 320 6 - 320				
Α	Label distance	> 2					
С	Width of liner	24 - 62	24 -	118	46 - 178		
DI	Left margin		≥	0			
Dr	Right margin	≥ 0					
Е	Label thickness	0,03 - 0,60					
F	Liner thickness	0,03 - 0,08					
G	Thickness label with liner	0,06 - 0,68					
V	Label feed	>5 >6 >8					
	 Small label sizes, thin materials or strong glue can lead to limitations. Critical applications need to be tested and cleared. 						

Table 9 Label dimensions

8 Labels 27

8.2 Device Dimensions

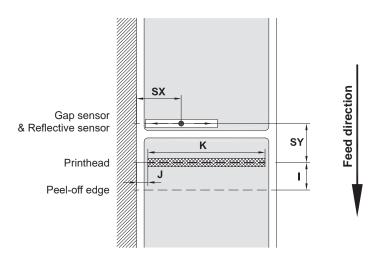


Figure 23 Device dimensions

Dim.	Designation		Dim. in mm							
			HERM	ES Q2	HERM	ES Q4	HERM	ES Q4.3	HERME	S Q6.3
			L	R	L	R	L	R	L	R
I	Distance printhead - pee	el-off edge				•	15			
J	Distance 1st heating po	int - material edge								
	without ribbon saver	203 dpi 300 dpi 600 dpi	- 1,0 1,0	- 1,0 1,0	- 1,0 1,0	- 1,0 1,0	1,0 1,0 -	1,0 1,0 -	1,0 1,0 -	1,0 1,0 -
	with ribbon saver	203 dpi 300 dpi 600 dpi	- - -	- - -	- 1,0 1,0	- 1,0 1,0	2,2 0,0 -	1,6 -0,7 -	0,2 2,9 -	0,2 2,9 -
K	Print width	203 dpi 300 dpi 600 dpi	56 54	- 6,9 I,1		5,7 5,7		4,0 8,4 -		8,0 2,6
SX	Distance gap/reflective s material edge i.e. permissible distance cut-out marks to the ma	of reflex or	2 -	26			2 -	60		
SY						6	2,5			

Table 10 Device dimensions

28 8 Labels 28

8.3 Reflex Mark Dimensions

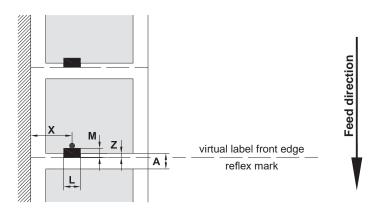


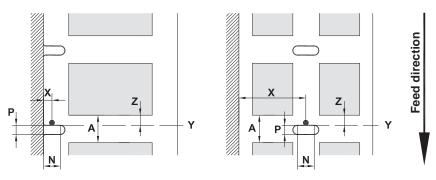
Figure 24 Reflex mark dimensions

Dim.	Designation	Dim. in mm					
		HERMES Q2	HERMES Q4 / Q4.3 / Q6.3				
Α	Label distance	> 2					
L	Width of reflex mark	> 5					
M	Height of reflex mark	3 - 10					
Χ	Distance mark - material edge	2 - 26	2 - 60				
Z	Distance virtual label front edge - actual label front edge	0 up to A / recomm.: 0					
	Adjust software settings						
	Specification is valid for black marks.						
	 Recognition of colored marks may fail. ▶ Preliminary tests are needed. 						

Table 11 Reflex mark dimensions

8 Labels 29

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
Α	Label distance	> 2	
N	Width of cut-out mark for marginal cut-out	> 5 > 8	
Р	Height of cut-out mark	2 - 10	
Х	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	0 up to A-P	
	Adjust software settings		

Table 12 Cut-out mark dimensions

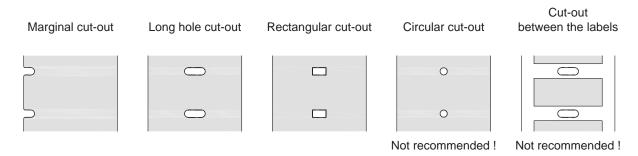


Figure 26 Samples for cut-out marks

30 9

Figure 27 Assembly dimensions HERMES Q-2

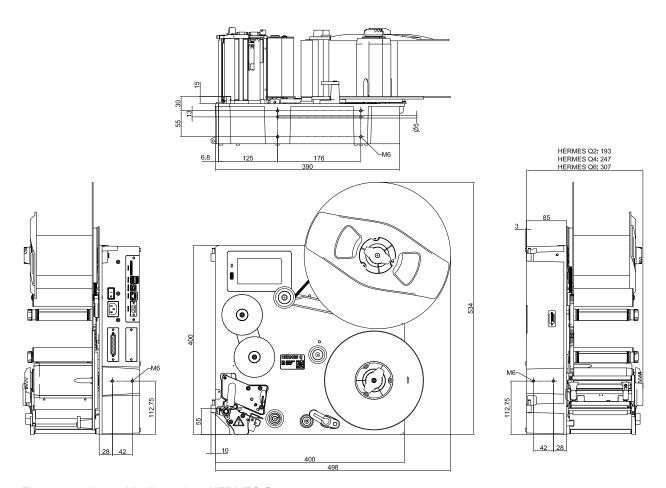


Figure 28 Assembly dimensions HERMES Q-3

10 Licenses 31

10.1 Declaration of Incorporation



cab Produkttechnik GmbH & Co KG Wilhelm-Schickard-Str. 14 D-76131 Karlsruhe Germany

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	• EN ISO 12100:2010
	• EN ISO 13857:2008
	• EN 349:1993+A1:2008
	• EN ISO 13849-1:2015
	• EN 62368-1: 2014+AC:2015
 Directive 2014/30/EU relating to electromagnetic cor Directive 2011/65/EU on the restriction of the use of 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 : cab Produkttechnik Sömmerda Gesellschaft für Computer-	Am Unterwege 18/20
cab Produkttechnik Sömmerda	Am Unterwege 18/20 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.

32 10 Licenses 32

10.2 EU Declaration of Conformity



cab Produkttechnik GmbH & Co KG Wilhelm-Schickard-Str. 14 D-76131 Karlsruhe Germany

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	• 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	• 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.

11 Index

Α
Assembly dimensions30
С
Cleaning 22 print head 22 print roller 22 Cleaning information 22 Contents of delivery 10 Control panel 8 Cut-out marks 29
D
Declaration of conformity
Environment5
Errors 23 messages 23 types 23
F
FCC32
н
Head locking system, setting18
Important information
Label sensor, setting16
License
Р
Peel-off mode
Print roller, cleaning
R
Reflex marks

Safety instructions	. 5
Safety marking	. 6
Service work	. 5
Setting-up1	0
Supply voltage	11
Switching on	11
Synchronization of the paper feed2	21
т	
Touchscreen display1	12
U	
Unpacking1	0
V	
Voltage	. 5
W	
Warning stickers	. 5