

Instructions



Label Printer



for the following products

Family	Туре
XC Q	XC Q4
	XC Q6.3

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Further documentation

Configuration Manual cab Printers

https://www.cab.de/media/pushfile.cfm?file=3257



Programming Manual cab Printers

https://www.cab.de/media/pushfile.cfm?file=3047







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4 1 Introduction

1.1 Instructions

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



Danger!

Draws attention to an exceptionally great, imminent danger to your health or life due to hazardous voltages.



Danger!

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



Warning!

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



Caution!

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



Attention!

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



Notel

Advices to make work routine easier or on important steps to be carried out.



Environment!

Gives you tips on protecting the environment.

- Handling instruction
- Reference to section, position, illustration number or document.
- **★** Option (accessories, peripheral equipment, special fittings).

Time Information in the display.

1.2 Intended Use

- 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.
- The device printer is intended exclusively for printing suitable materials. 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.
- Usage for the intended purpose also includes complying with this 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.
- If the device is operated with the cover open, ensure that people's clothing, hair, jewelry etc. do not come into contact with the exposed rotating parts.
- The device or parts of it 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 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 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.

6 2 Installation 6

2.1 Device Overview

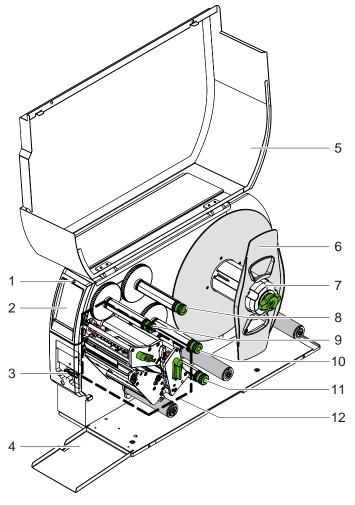
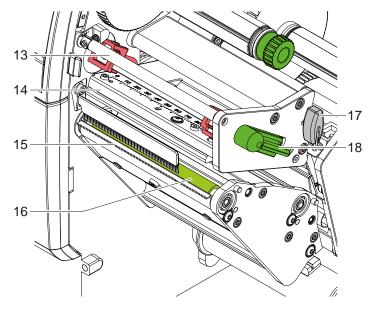


Figure 1 Overview

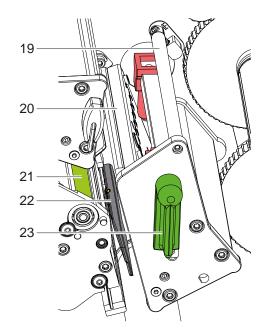
- LED "Power on"
 Display
 Peripheral connector
 Flap
- 5 Cover
- 6 Margin stop
- 7 Roll retainer
- 8 Upper ribbon supply hub
- 9 Upper ribbon take-up hub
- 10 Lower ribbon take-up hub
- 11 Lower ribbon supply hub
- 12 Print mechanics



- 13 Upper ribbon deflection
- 14 Printhead retainer with upper printhead
- 15 Tear-off plate
- 16 Upper print roller
- 17 Allen key
- 18 Upper printhead locking lever

Figure 2 Print mechanics - upper print unit for printing the main color

2 Installation 7



- 19 Lower ribbon deflection
- 20 Printhead retainer with lower printhead
- 21 Lower print roller
- 22 Label sensor
- 23 Lower printhead locking lever

Figure 3 Print mechanics - lower print unit for printing the secondary color

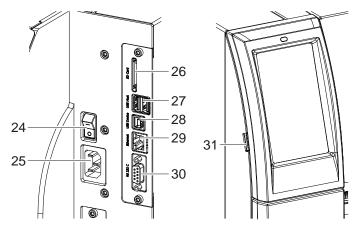


Figure 4 Connections

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

8 2 Installation

2.2 Unpacking and Setting-up the Printer

- Lift the label printer out of the box.
- ▶ Check label printer for damage which may have occurred during transport.
- ▶ Set up printer on a level surface.
- ▶ Remove foam transportation safeguards near the printhead.
- ► Check delivery for completeness.

Contents of delivery:

- · Label printer
- Power cable
- USB cable
- 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 label printers only in dry locations protected from splash water.

2.3 Connecting the Device

The standard available interfaces and connectors are shown in Figure 4.

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 $230 \text{ V}^{-/50}$ Hz or $115 \text{ V}^{-/60}$ Hz without adjustment.

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

2.3.2 Connecting to a Computer or Computer Network



Attention!

Loss of material!

The RS232 interface is unsuitable for fast transmission of changing data \triangleright 5.6 on page 18.

▶ Use USB or Ethernet interface for print operation.



Attention!

Inadequate or no grounding can cause malfunctions during operations.

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

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

For details of the configuration of the individual 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). The printer performs a system test, and then shows *Ready* in the display (2).

3 Touchscreen Display

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

- Issuing, interrupting, continuing and canceling print jobs,
- 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.



Notel

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

3.1 Start Screen

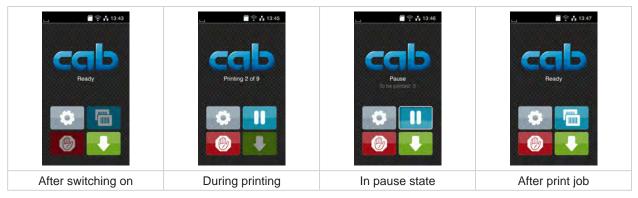


Figure 5 Start screen

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 1 Symbols on the start screen



Note!

Inactive symbols are shaded.

10 3 Touchscreen Display

With special software or hardware configurations additional symbols appear on the start screen:

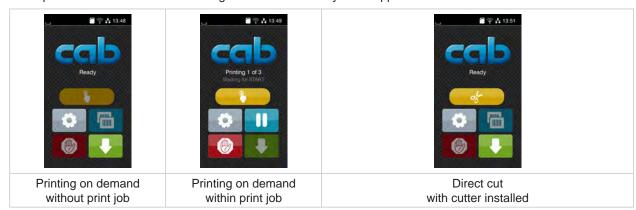


Figure 6 Optional symbols on the start screen



Table 2 Optional symbols on the start screen

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



Figure 7 Widgets in the start screen

≜	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.
411111	SD card installed
Ö	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.
7	Ethernet connection active
4	USB connection active
abc	abc program active
09:45	Clock time

Table 3 Widgets in the start screen

3 Touchscreen Display

3.2 Navigation in the Menu



Figure 8 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.

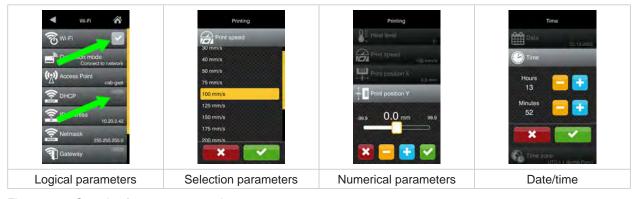


Figure 9 Samples for parameter setting

	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

12 4 Loading Material 12

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 Media from Roll

4.1.1 Positioning the Media Roll on the Roll Retainer

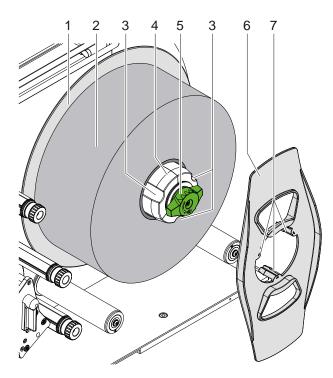


Figure 10 Loading media from roll

- 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 roll retainer against the label roll (2).
- 6. Turn knob (5) counterclockwise to tighten the label roll and the margin stop on the roll retainer.

4 Loading Material 13

4.1.2 Inserting Labels into the Print Mechanics

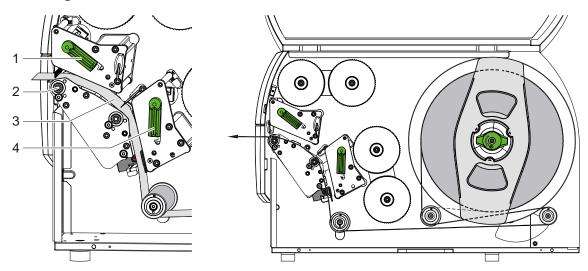


Figure 11 Loading labels

Figure 12 Label feed path

- 1. Turn levers (1,4) counterclockwise to lift both printheads.
- 2. Unroll a label strip and guide it through the print mechanics as shown in figure 12 to the upper print roller (2). The broken line shows the path for inside wound labels.
- 3. Fix the media by closing the lower printhead.
- 4. Tighten the label strip between the printheads and close the upper printhead.

4.1.3 Setting the label sensor

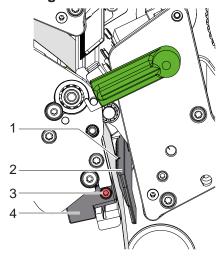


Figure 13 Setting the label sensor

The label sensor can be shifted perpendicular to the direction of paper flow for adaptation to the media. The sensor unit (2) of the label sensor is marked with an indentation in the label sensor retainer. When the printer is switched on, a yellow LED illuminates the sensor position.

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

14 4 Loading Material 14

4.1.4 Setting the Head Locking Systems

The printheads are pushed on via two plungers. The locations of the outer plungers 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.

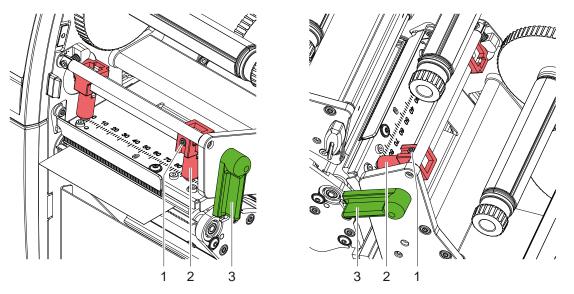


Figure 14 Setting the upper head locking system

Figure 15 Setting the lower head locking system

- 1. Turn the levers (3) clockwise to lock the printheads.
- 2. Loosen threaded pins (1) at outer plungers (2) with Allen key.
- 3. Position outer plungers (2) above the outer label edge and tighten threaded pins (1).

4 Loading Material 15

4.2 Loading Transfer Ribbon

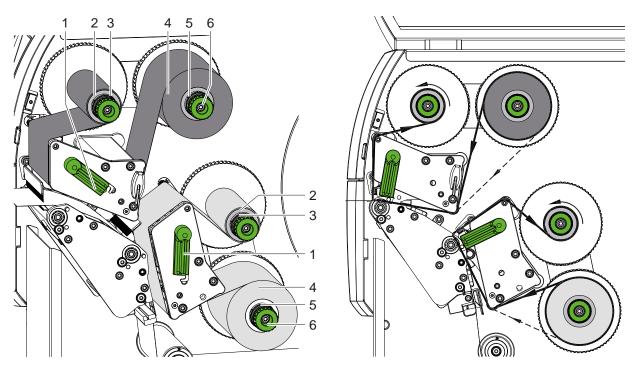


Figure 16 Loading transfer ribbon

Figure 17 Transfer ribbon feed path

Attention!

Risk of errors by wrong color assignment.

▶ Ensure that programming and assignment of ribbon colors to the print units are matching.



The lower print unit is equipped with a ribbon saver. If there is no information to print in the assigned color during a longer label feed, the printhead will be lifted, and the transfer ribbon will be paused from feeding.

► Use the upper print unit for printing the main color (typically black) and the lower print unit for printing the secondary color.

Loading transfer ribbon can be performed for both print units in the same manner:

- 1. Clean printhead before loading the transfer ribbon (▷ 6.3 on page 20).
- 2. Turn lever (1) counterclockwise to open the printhead.
- 3. Slide transfer ribbon roll (4) onto the ribbon supply hub (5) until it stops and so that the color coating of the ribbon faces away from the printhead after loading.
- 4. Hold ribbon supply hub (5) firmly and turn knob (6) counterclockwise until the transfer ribbon roll is secured.

Note!

To rewind the transfer ribbon use a core with a width between the width of the supply roll and 115 mm.

- 5. Slide suitable transfer ribbon core (2) onto the transfer ribbon take-up hub (3). Position and secure it in the same way like the supply roll.
- 6. Guide transfer ribbon through the print unit as shown in Figure 17. The broken line shows the path for ribbon with inkside out.
- 7. Secure starting end of transfer ribbon to middle of the transfer ribbon core (2) with adhesive tape. Ensure counter-clockwise rotation direction of the transfer ribbon take-up hub.
- 8. Turn transfer ribbon take-up hub (3) counterclockwise to smooth out the feed path of the transfer ribbon.
- 9. Turn lever (1) clockwise to lock the printhead.

16 4 Loading Material 16

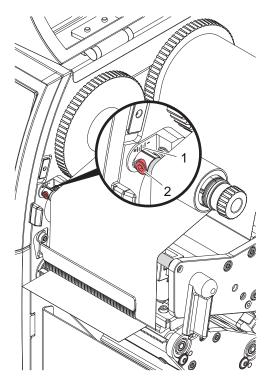
4.3 Setting the Feed Path of the Transfer Ribbon

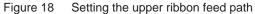
Transfer ribbon wrinkling can lead to print image errors. Transfer ribbon deflection can be adjusted so as to prevent wrinkles.



Note!

The adjustment is best carried out during printing.





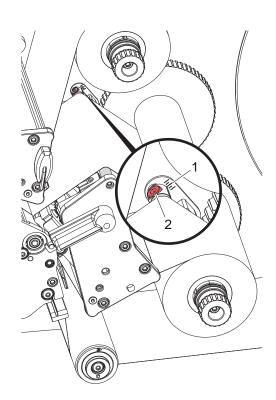


Figure 19 Setting the lower ribbon feed path

- 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 ribbon is tightened, and the outer edge is tightened in the direction.

5 Operation 17

5.1 Printhead Protection



Attention!

Printhead damage caused by improper handling!

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

The printer is ready for operation when all connections have been made and labels and, if applicable, the transfer ribbon have been loaded.

5.2 Designing the Print Image with Direct Programming

- ▶ Define the double material width as label width.
- ▶ Place the information for the main color at x-coordinates between 0 and the material width.
- ▶ Place the information for the secondary color at x-coordinates between the single and the double material width.



Attention!

Objects with x-coordinates on both sides of the single material width cannot certainly be assigned to one color.

▶ Place each object completely into one of the color zones.

5.3 Disabling the Lower Printhead

The lower printhead can be switched off. Therefore is it possible to print labels in a similar way as in on side printers.

- ► Activate the parameter Setup > Printing > Disable lower head.
- Send a print job with single label width.

5.4 Ribbon Saving

If there is no information to print during a longer label feed, in the lower print unit 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).

5.5 Cutting

* For devices with cutter only.

To guarantee the correct length of the first label a cut prior print job is required :

- Activate in the printer driver menu General > Print Settings > Accessories Options > [Cutter] the setting "Cut before print job".
- Activate in cablabel S3 under Options > Connected peripheral > [Cutter] the setting "Cut before print job".
 or
- ► For direct programming use the command **C** s > Programming Manual.

18 5 Operation 18

5.6 Avoiding Loss of Material



Attention!

Loss of material!

The print images for the upper and the lower side of one label/section are printed at two different places in the media feed.

Therefore every interruption of the continuos print process has the following consequences:

- Material already printed at the lower side will be fed to the upper printhead to complete the print of the label/section, but the following media will not be printed at the lower side.
- A media backfeed to the lower printhead is not allowed due to the reliability of the media transport.
- Following blank sections in the media strip are generated, which cannot be used.
- For operation with cutter the length of the blank section is at least 110 mm for continuos material. For structured media where the print image has to be synchronized to the media transport the loss of material can reach a length of more than 300 mm.

To minimize the loss of material it is necessary to avoid interruptions of the continuos print process.

- ▶ Interrupt the print process only if it is absolute necessary.
- ▶ Avoid print jobs with a small amount of labels/sections, especially single prints.
- ▶ Avoid predictable error situations ▷ 5.7 on page 19. If errors occur the loss of material is particular high. Besides the blank section also material must be rejected which is partly printed.

Print Optimization

To minimize the loss of material the parameter Setup > Printing > Double print optim. can be activated.

With this setting a print job will not be carried out immediately till the end. The printer stops at a position, where a following print job could be started without blank labels. In this position the printer waits for the next job. After the job is received the previous job will be completed and the new job will be started without blank labels between the jobs. If no further job can be awaited the current job can be completed with *Finalize print job*.

Optimization of the Data Transfer

If sequent labels/sections contain differing information, the internal preparation of the second sections must be completed before the printing by the lower printhead for the first section has been finished!

Otherwise the first section will be fed to the upper printhead to complete the print without printing the next section at the lower side. The print of the second section begins only after completion of the first section.

Therefore it is necessary to minimize the data to be transferred. i.e. to avoid transferring complete label descriptions and to transfer the changing data only:



Note!

Therefore the parameter "Software optimization" in the printer driver is activated permanently. With cablabel S3 the data transmission will be optimized automatically.

► For direct programming use the replace command R for changing data > Programming Manual.



Attention!

Loss of material!

The RS232 interface is unsuitable for fast transmission of changing data.

▶ Use USB or Ethernet interface for print operation.

5 Operation 19

5.7 Avoiding Loss of Data



Attention!

Loss of data!

When correctable errors occur labels/sections which are already printed by the lower printhead but not are completed by the upper printhead cannot be repeated after error correction. The data of those sections are lost for the printer.

- ► Avoid predictable error situations.
- ► To avoid the errors "Out of paper" or "Out of ribbon" switch the printer to the Pause state before the material runs out. Continue the print process by pressing the pause key after re-loading material. That way the data are saved.

Pause on Media Low

The error "Out of ribbon" can be avoided automatically with the integrated ribbon low warning:

- ► Activate the parameter Setup > Ribbon > Pause on warning.
- ▶ Set the rest diameter of the ribbon supply roll with the parameter *Setup > Ribbon > Warn level ribbon* to e.g. *35 mm*. If the diameter of the ribbon roll falls below the set value the automatically switches to the *Pause* state.

20 6 Cleaning 20

6.1 Cleaning Information



Danger!

Risk of death via electric shock!

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

The transfer printer requires very little maintenance.

It is important to clean the thermal printheads 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.

Atte

Attention!

The printer can be damaged by aggressive cleaners.

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

Recommended cleaners	
Print rollers	Cleaner for rollers W1 (Part No. 9200051)
Printing line 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 Rollers

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

- ► Lift the printheads.
- ▶ Remove media 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 Printheads

Cleaning intervals: direct thermal printing - every media roll change thermal transfer printing - every ribbon roll change

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

!

Attention!

Printheads can be damaged!

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

Do not touch protective glass layer of the printheads.

1

Attention!

Risk of injury from the hot printhead lines.

Ensure that the printheads have cooled down before starting cleaning.

- Lift the printheads.
- ▶ Remove media and transfer ribbon from the printer.
- ▶ Clean printhead surfaces with a cotton swab or a soft cloth dipped in Isopropanol > 99,9%.
- ▶ Allow printheads to dry for 2–3 minutes before commissioning the printer.

7 Fault Correction 21

7.1 Error Display

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







Figure 20 Error display

The error treatment is pending on the error type \triangleright 7.2 on page 22.

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. Following 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 Button in the error display

1

Attention!

The labels, which are printed by the lower printer but not yet printed by the upper printhead when the error occurs, cannot be repeated by the printer. So the amount of the printed label will be reduced within the print job.

▶ If necessary print more labels in a new job.

If the print job contains counters, after pressing *Repeat* the print job would be resumed with erroneous counter values.

- **▶ Quit the print job with** *Cancel.*
- ▶ Start a new print job with adapted counter values.

22 7 Fault Correction 22

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.	
Check ribbon ink side (lower/upper printhead)	Identified ribbon unwinding direction does not match to the setup setting	Ribbon loaded incorrectly. Clean the printhead ▷ 6.3 on page 20. Load the ribbon correctly.	
		Setting does not match to the used ribbon. Correct the setting.	
Cutter blocked	Cutter cannot return into its home position and stays in an undefined position	Switch off the printer. Remove material. Switch on the printer. Restart print job. Change material	
	No cutter function	Switch the printer off and then on. If error recurs call service.	
Cutter jammed	The cutter is unable to cut the labels but is able to return into its home position	Press Cancel Change material.	
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.	
Lower printhead disabled and closed	The lower printhead is closed although the parameter <i>Disable lower head</i> is activated	For single side printing open the lower printhead. For double side printing deactivate the parameter Disable lower head.	
Lower/upper printhead open	Printhead not locked	Lock printhead.	
Lower/upper	Out of transfer ribbon	Insert new transfer ribbon.	
printhead out of ribbon	Transfer ribbon melted during printing	Cancel current print job. Change the heat level via software. Clean the printhead ▷ 6.3 on page 20. 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.	
Lower/upper 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.	
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.	
Moving head failed	Error of the ribbon saver, end position for lifting or lowering the printhead not reached	Switch the printer off and then on. If error recurs call service.	
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.	
	Printer is loaded with continuous paper, but the software is set on labels	Cancel current print job. Change the label format set in the software. Restart the print job.	
No label size	The size of the label is not defined in the programming.	Check programming.	

7 Fault Correction 23

Error message	Cause	Remedy
Out of paper	Out of label roll	Load labels.
	Error in the paper feed	Check paper feed.
Read error	Read error when reading from the memory card	Check data of the card. Backup data, reformat card.
Remove lower/	Transfer ribbon is loaded although the	for direct thermal printing remove ribbon
upper 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
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

24 7 Fault Correction 24

7.3 Problem Solution

Problem	Cause	Remedy
Transfer ribbon creases	Transfer ribbon deflection not adjusted	Adjust the transfer ribbon deflection. > 4.3 on page 16
	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.
Vertical white lines in the print image	Printhead is dirty	Clean the printhead. ▷ 6.3 on page 20
	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. ▷ 6.3 on page 20
	Head locking system not adjusted	Adjust the head locking system.

Table 8 Problem solution

8 Media 25

8.1 Media Dimensions

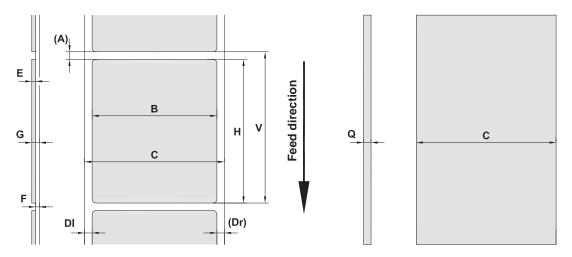


Figure 21 Media dimensions

Dim.	Designation	Dim. in mm	
		XC Q4	XC Q6.3
В	Label width	20 - 116	46 - 176
Α	Label distance	>	2
С	Media width (liner, continuos media)	24 - 120	50 - 180
DL	Left margin	≥	0
DR	Right margin	≥ 0	
Е	Label thickness	≤ 0,1	
F	Liner thickness	≤ 0,1	
Q	Media thickness continuos media	≤ 0,3	
-	Height of media passage	2	
Н	Label height, print zone height	≥ 20	
V	Feed length	≥ 20	
	 Small label sizes, thin materials or strong glue can lead to limitations. Critical applications need to be tested and cleared. 		
	 Note the bending stiffness! Material must be flexible to follow the radius of the print roller! 		

Table 9 Media dimensions

26 8 Media 26

8.2 Device Dimensions

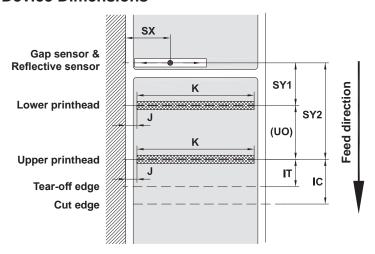


Figure 22 Device dimensions

Dim.	Designation	Dim. in mm	
		XC Q4	XC Q6.3
IC	Distance upper printhead - cut edge cutter CU	20,7	
	Distance upper printhead - cut edge cutter CSQ	21,8	-
IT	Distance upper printhead - tear-off edge	13	3,5
J	Distance 1st heating point - material edge	2,0	3,6
K	Print width	105,7	162,6
SX	Distance gap/reflective sensor - material edge	5 - 60	
	i.e. permissible distance of reflex or cut-out marks to the material edge		
SY1	Distance gap/reflective sensor - lower printhead	29,2	
SY2	Distance gap/reflective sensor - upper printhead	119,5	
UO	Distance lower printhead - upper printhead	90,3	

Table 10 Device dimensions

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8.3 Reflex Mark Dimensions

Labels with reflex marks

Endless material with reflex marks

Virtual label front edge reflex mark

Figure 23 Reflex mark dimensions

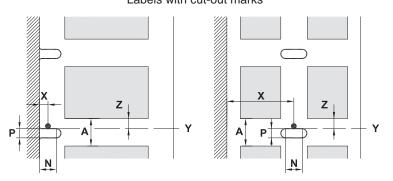
Dim.	Designation	Dim. in mm
Α	Label distance	> 2
L	Width of reflex mark	> 5
М	Height of reflex mark	3 - 10
X	Distance mark - material edge	5 - 60
Z	Distance virtual label front edge - actual label front edge	0 up to A /
	► Adjust software settings	recomm.: 0
	Reflex marks must be on the back side of 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 11 Reflex mark dimensions

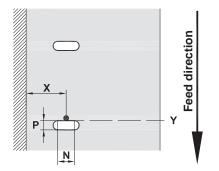
28 8 Media 28

8.4 Cut-out Mark Dimensions

Labels with cut-out marks



Endless material with cut-out marks



for marginal cut-out marks minimum liner thickness 0,06 mm

Figure 24 Cut-out mark dimensions

Dim.	Designation	Dim. in mm
А	Label distance	> 2
N	Width of cut-out mark	> 5
	for marginal cut-out	> 8
Р	Height of cut-out mark	2 - 10
X	Distance mark - material edge	5 - 60
Υ	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

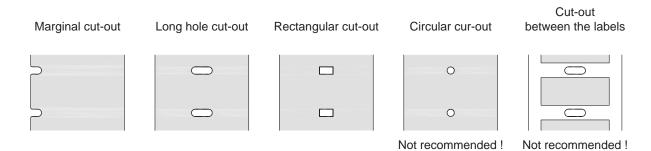


Figure 25 Samples for cut-out marks

9 Licenses 29

9.1 Reference to the EU Declaration of Conformity

The printers of the XC Q series comply with the relevant fundamental regulations of the EU Rules for Safety and Health:

- Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits
- 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

EU Declaration of Conformity





9.2 **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.

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