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Label printers  
for printing with two colors

**XC Q**  
Made in Germany

## XC Q label printers for printing with two colors



## Highlights

- **300 dpi**, printable as wide as 105.7 mm or 162.6 mm
- **Heating** can be assigned separately to each print head.
- If **printing only with print head 2**, print head 1 is lifted by menu control.
- **Automated ribbon saving** is provided on print head 1. The print head is lifted and the ribbon is stopped during material feed. Opening or closing the print head may result in stress marks on wax ribbons.
- **Continuous print images** when cutting at no backfeed
- **Optimized printing**, so that multiple print jobs can be printed seamless
- **CSQ 402 cutters** are provided for XC Q4 printers, **CU600 cutters** for XC Q6.3.
- Find **documentation** on the Internet. DVDs are no longer part of delivery.



# Types of printers

1.1



## XC Q4 providing a tear-off plate

All materials wound on a roll can be printed.

Label printer	XC Q4
Print resolution	dpi 300
Print speed	mm/s max. 150
Print width	mm max. 105.7
Width of a material	mm max. 114

1.2



## XC Q4 providing a CSQ 402 cutter

Paper labels and self-adhesive labels, cardboard and synthetic materials can be cut.

Label printer	XC Q4-C2
Print resolution	dpi 300
Print speed	mm/s max. 150
Print width	mm max. 105.7
Width of a material	mm max. 114
Tray	Materials as long as mm 100

1.3



## XC Q6.3 providing a tear-off plate

All materials wound on a roll can be printed.

Label printer	XC Q6.3
Print resolution	dpi 300
Print speed	mm/s max. 150
Print width	mm max. 162.6
Width of a material	mm max. 180

# Technical data

● typical ■ standard □ option

Label printer		XC Q4	XC Q6.3
Guidance of materials		aligned to the left	
Print method	Thermal transfer	●	
Print resolution	dpi	300	300
Print speed	mm/s max.	150	150
Print width	mm max.	105.7	162.6
Automated ribbon saving		●	●
<b>Material<sup>1)</sup></b>			
Paper, cardboard, synthetics PET, PE, PP, PI, PVC, PU, acrylate, Tyvec		●	
Textile tape		●	-
Finishing	Roll	●	
	Roll diameter	mm max.	300
	Core diameter	mm	76
	Winding	outside or inside	
Label	Width	mm	20 - 116
	Height	mm at least	10
	Thickness	mm max.	0.1
Liner	Width	mm	24 - 120
	Thickness	mm	0.03 - 0.16
Continuous	Width	mm	24 - 120
	Thickness	mm	0.03 - 0.5
	Weight (cardboard)	g/m <sup>2</sup> max.	300
Ribbon <sup>2)</sup>	Color side	outside or inside	
	Roll diameter	mm max.	80
	Core diameter	mm	25.4
	Length	m max.	450
	Width	mm max.	114
<b>Printer dimensions, weights</b>		170	
Width x Height x Depth		248 x 395 x 554	358 x 395 x 554
Weight		22	24
<b>Label sensors, position indicators</b>			
Transmissive sensor		detecting labels, punch marks, materials ending, print marks on translucent materials	
Reflective sensor	from below or top	detecting	labels, materials ending, print marks on non-translucent materials
Sensor distance	to locating edge	mm	5 - 60
Material passage		mm max.	2
<b>Electronics</b>			
Processor, 32 bit clock rate		MHz	800
RAM		MB	256
IFFS		MB	50
Port for plugging a SD memory card (SDHC, SDXC)		GB max.	512
Battery for indicating time and date, real-time clock			■
Data kept in memory (e.g. serial numbers) when power turns off			■
<b>Interfaces</b>			
RS232-C 1,200 to 230,400 baud / 8 bit			■
USB 2.0 Hi-Speed device to plug a PC			■
Ethernet 10/100 Mbit/s		LPD, RawIP printing, SOAP web service, OPC UA, WebDAV DHCP, HTTP/HTTPS, FTP/FTPS, TIME, NTP, Zeroconf, SNMP, SMTP, VNC	
2 USB hosts on the control panel, 2 USB hosts on the back of a unit		Service key, USB stick, USB WLAN stick, USB WLAN stick with a rod antenna keyboard, barcode scanner, external control panel	
USB host, 24 VDC, for peripheral plugging			■
Digital I/O interface providing 8 inputs and 8 outputs			□

<sup>1)</sup> Specifications are standards. Operations including small, slim, thick or stiff materials need testing, so do strongly adhesive labels.

<sup>2)</sup> A ribbon should be at least as wide as the liner material.

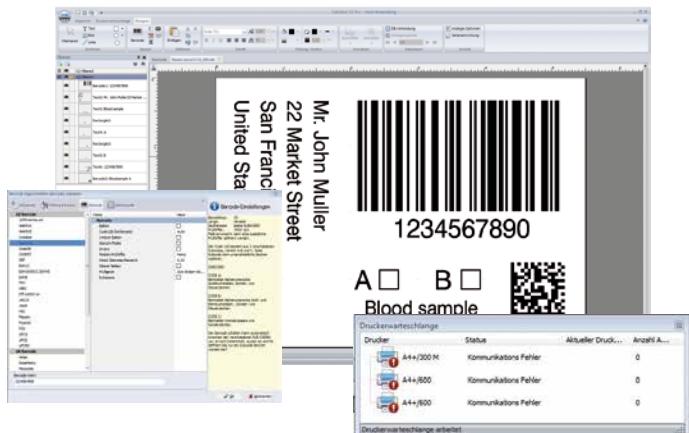
# Technical data

			<input checked="" type="checkbox"/> standard	<input type="checkbox"/> option
<b>Operating data</b>				
Voltage	100-240 VAC, 50/60 Hz, PFC			
Consumption of power	<10 W in standby / 100 W in typical operation / max. 200W			
Temperature / Operation humidity	+5 - 40°C / 10 - 85 %, not condensing			
Stock	0 - 60°C / 20 - 85 %, not condensing			
Transport	-25 - 60°C / 20 - 85 %, not condensing			
Approvals	CE, UKCA, FCC Class A, ICES-3, cULus, CB, CCC, BSMI, Mexico Reg.			
in preparation	BIS, KC-Mark			
<b>Control panel</b>				
Color LCD touchscreen	Diagonal	"	4.3	
	Resolution	Width x Height	px	272 x 480
<b>Setup options</b>				
	Print Labels Ribbon Tear off Cut Interfaces Error	Region: - Language - Country - Keyboard - Time zone Time Display: - Brightness - Power saving mode - Orientation Interpreter		
<b>Status bar</b>				
	Receive data Record datastream Warning to a ribbon ending SD memory card plugged USB stick plugged	WLAN Ethernet USB Slave Time		
<b>Controls</b>				
	Ribbon 1/2 - Winding - Prior warning - End of ribbon Running out of material	Print head 1/2 - Voltage - Temperature - open Peripheral error		
<b>Test routines</b>				
System diagnostics	upon startup, detection of print head included			
Information display, test printout, analysis	Status printout Fonts list List of units WLAN status	Test grid Label profile List of events Monitor mode		All codes may vary in height, modular width and ratio. 0°, 90°, 180°, 270° orientations
Status reports	- Printout of print durations, running hours, etc. - Status of a unit requested by software command - Display of errors related to a network, barcode or peripheral device, as well as links missing			
<b>Fonts</b>				
Integral	5 bitmap fonts: 12 x 12 dots 16 x 16 dots 16 x 32 dots OCR-A OCR-B	7 vector fonts: AR Heiti Medium GB-Mono CG Triumvirate Condensed Bold Garuda HanWangHeiLight Monospace 821 Swiss 721 Swiss 721 Bold		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
For storing	TrueType fonts			
Sets of characters	Windows-1250 to -1257 DOS 437, 737, 775, 850, 852, 857, 862, 864, 866, 869 EBCDIC 500 ISO 8859-1 to -10 and -13 to -16 WinOEM 720 UTF-8 MacRoman DEC MCS KOI8-R			
	Western European Eastern European Chinese, simplified Chinese, traditional Thai	Cyrillic Greek Latin Hebrew Arabian		
<b>Fonts</b>				
Bitmap	1 mm to 3 mm wide and high Zoom factors 2 to 10 0°, 90°, 180°, 270° orientations			
Vector / TrueType	0.9 mm to 128 mm wide and high Continuous zoom 360° orientation in steps of 1°			
Styles	bold, italic, underlined, outline, inverse - depending on the font type			
Character spacing	proportional or monospace			
<b>Graphics</b>				
Elements	lines, arrows, rectangles, circles, ellipses - filled or gradient			
Formats	PCX, IMG, BMP, TIF, MAC, GIF, PNG			
<b>Codes</b>				
1D barcodes (linear)	Code 39, Code 93 Code 39 Full ASCII Code 128 A, B, C EAN 8, 13 EAN/UCC 128/GS1-128 EAN/UPC Appendix 2 EAN/UPC Appendix 5 FIM HIBC	Interleaved 2/5 Ident and routing code of Deutsche Post Codabar JAN 8, 13 MSI Plessey Postnet RSS 14 UPC A, E, E0		
2D code, stacked codes	DataMatrix DataMatrix Rectangle Extension QR-Code Micro QR-Code GS1 QR-Code GS1 DataMatrix PDF 417 Micro PDF 417 UPS Maxicode GS1 DataBar Aztec Codablock F Dotcode RSS 14 truncated, limited, stacked, stacked omni-directional			
		Feasibility of check digits, plain text printouts and start/stop coding depends on the type of code.		
<b>Software</b>				
Label software	cablabel S3 Lite cablabel S3 Viewer cablabel S3 Pro cablabel S3 Print		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Running also with	CODESOFT Loftware Spectrum NiceLabel BarTender			
Stand-alone operation			<input checked="" type="checkbox"/>	
Windows printer drivers certified WHQL for	Windows 10 Windows 11	Server 2016 Server 2019 Server 2022		<input checked="" type="checkbox"/>
Apple printer drivers	Mac OS X 10.6 or any later release			
Linux printer drivers	CUPS 1.2 or any later release			
Programming	JScript printer language abc Basic Compiler ZPL II (datastream be tested in advance)			
Integration	SAP Database Connector			
Administration	Printer control Configuration on the Intranet and Internet			
Free and Open Source software in cab products: <a href="http://www.cab.de/opensource">www.cab.de/opensource</a>				

# cablabeled S3 software

## Design, print, administrate

cablabeled S3 opens up the full potential of cab devices. Defining a label is first. Modular design adapts cablabeled S3 to requirements step by step. Plug-ins are embedded. Native JScript programming, for example, is supported by the JScript Viewer. The designer user interface and JScript codes synchronize in real time. Optional features can be integrated, such as the Database Connector or barcode verifiers.



See further information on  
[www.cab.de/en/cablabeled](http://www.cab.de/en/cablabeled)

## Stand-alone operation

This operating mode enables a printer select and print labels while not connected to a host system. Labels can be designed using software such as cablabeled S3 or a text editor on a PC. Label formats, texts, graphics and data of a database can be stored on a memory card, a USB stick or a printer's IFFS memory. Only variable data are sent by a keyboard, a barcode scanner, a scale or any other host system to a printer, or be recalled by the Database Connector from a host and printed.



## Printer control

### Drivers



cab provides drivers to control a printer with software other than cablabeled S3.



Free download on [www.cab.de/en/support](http://www.cab.de/en/support)



### Programming



#### JScript

cab printers embed JScript language.

Download free manual on [www.cab.de/en/programming](http://www.cab.de/en/programming)



#### abc Basic Compiler

Integral to the firmware, abc in addition to JScript enables advanced programming before data are edited for printout. For example, external printer languages can be replaced without intervening in a print job in progress. Data may be imported as well from other systems such as scales, barcode scanners or PLC.

### Integration



#### Printer Vendor program

cab as a member of this program developed a replace method for controlling cab printers from SAP<sup>1)</sup> R/3 using SAPScript. Only variable data are sent by a host system to a printer. They add on the printer to local images and fonts (IFFS, memory card, etc.).

### Database Connector



Printers in a network may access data from a ODBC / OLEDB database and print it on labels. Data can be rewritten to a database while print jobs are in progress.

## Printer administration

### Configuration on the Intranet und Internet



Integral HTTP / FTP servers enable a printer be controlled or configured, firmware be updated and memory cards be administrated using standard applications such as a web browser or a FTP client. Administrators and operators on behalf of SNMP / SMTP are notified of states, alerts and errors by email or SNMP datagrams. Time and date are synchronized by a time server.

## OPC UA



All the latest cab printers have been designed ready for interacting with machines and components of different manufacturers in industrial plants. An OPC UA server is part of the firmware.

See further information on [www.cab.de/en/opcua](http://www.cab.de/en/opcua)

<sup>1)</sup> SAP and associated logos are trademarks or registered trademarks of SAP SE.

# Accessories / optional equipment

2.1		<b>SD memory card</b>
2.2		<b>USB stick</b>
2.3		<b>USB WLAN stick</b> 2.4 GHz 802.11b/g/n Hotspot mode or infrastructure mode
2.4		<b>USB WLAN stick with a rod antenna</b> for extended range of operation 2.4 GHz 802.11b/g/n + 5 GHz 802.11a/n/ac Hotspot mode or infrastructure mode
2.6		<b>I/O interface plug</b> SUB-D, 25 pins, for connecting all control signals to the I/O interface
2.7		<b>Digital I/O interface</b> Labeling is triggered via a PLC, a sensor or a hand switch. Status reports and errors are displayed simultaneously.
2.8		<b>Fanfold guide for XC Q4 and XC Q6.3</b> Fanfold labels are inserted behind the print head. A guide in addition to a brake enable the labels be fed reliably to the print mechanics.

## Cutting, rewinding



### Cutters

Paper, cardboard, textile and synthetic materials can be cut.

A CSQ can be pivoted to simplify material changeover.

A tray allows collecting a maximum of 50 labels.

Label heights can be adjusted.

A CU400 is still recommended with textile operations.



Cutter	CSQ 402	CU400	CU600
Operated with	XC Q4	XC Q4	XC Q6.3
Material:			
Passage width mm max.	120	120	180
Passage height mm max.	2.0	2.0	2.0
Weight (cardboard) gr/m <sup>2</sup> max.	300	300	300
Thickness mm max.	1.1	1.1	1.1
Cutting length mm at least	10	5	5
Tray Materials as wide as mm	100	100	-
Performance cuts/min at use of material 1 mm high, no backfeed	200	100	100
Controls	no final cutter position		
	cutter cover removed	-	-



**External ER4, ER6 rewinders**, power supply built in  
Label webs may be wound outside or inside. They are wound consistently and tight by electronic control, with a pendulum arm.

External rewinder	ER4/300	ER6/300
Operated with	XC Q4	XC Q6.3
Width of a material mm max.	120	180
Roll diameter mm max.		300
Core diameter mm	40 if a winder axle or a cardboard core are in use 76 if a cardboard core is in use with an adapter	
Winding	outside or inside	
<b>Adapter kit</b>	<input type="checkbox"/>	<input type="checkbox"/>

# Delivery program

## Label printers

Pos.	Item no.	Designation
1.1		6011520 XC Q4 label printer
1.2		6011522 XC Q4-C2 label printer with a CSQ 402 cutter
1.3		6011525 XC Q6.3 label printer

xxxxxx.250 options assembled

## Wear parts

Pos.	Item no.	Designation
	5987089.001 5987097.001	Print head 4/300 X Print head 6.3/300 X
	5954180.001 5954245.001	DR4 print roller DR6 print roller

## Scope of delivery

Label printer  
 Type E+F power cable, 1.8 m  
 Connecting USB cable, 1.8 m  
 Instructions DE / EN

Print head 4/300 X  
 Print head 6.3/300 X

DR4 print roller  
 DR6 print roller

Instructions  
 Configuration manuals DE / EN / FR  
 Service manuals DE / EN  
 Spare parts lists DE / EN  
 Programming manual EN  
 Windows printer drivers certified WHQL for  
 Windows 10 Server 2016  
 Windows 11 Server 2019  
 Windows 22 Server 2022  
 Apple Mac OS X printer drivers DE / EN / FR  
 Linux printer drivers DE / EN / FR  
 cablabel S3 Lite software  
 cablabel S3 Viewer  
 Database Connector

## Provided online



<https://setup.cab.de/en>

## Accessories / optional equipment

Pos.	Item no.	Designation
2.1		5977370 SD memory card
2.2		5977730 USB stick
2.3		5978912 USB WLAN stick 2.4 GHz 802.11b/g/n
2.4		5977731 USB WLAN stick with a rod antenna 2.4 GHz 802.11b/g/n + 5 GHz a/n/ac
2.6		5917651.xxx I/O interface plug SUB-D, 25 pins
2.7		5551447.xxx Digital I/O interface
2.8		6011930.xxx Fanfold guide XC Q
5.1		5978900 CU400 cutter tray provided
		5979033 CU600 cutter
6.1		5946090 External ER4/300 rewinder 5946420 External ER6/300 rewinder
6.2		6011796 XC Q4 adapter kit 6011797 XC Q6.3 adapter kit
3.1		5984565.xxx CSQ 402 cutter

xxx - .250 assembled to a printer  
 .001 separate delivery  
 resp. spare part

## Accessories

Accessory products are plugged or screwed to a printer by a customer.



See further accessories on  
[www.cab.de/en/xcq-accessories](http://www.cab.de/en/xcq-accessories)

## Optional equipment

Options are parts or units to perform special functions.  
 They are assembled to a printer in addition to or instead of standards.  
 If order implies options be assembled ex factory,  
 corresponding item numbers are added by .250.  
 Options delivered separately are added by .001.

# Delivery program

## Label software

Pos.	Item no.	Designation
11.7	Bundle	cablabel S3 Lite (download on cab.de/en)
	5588001	cablabel S3 Pro 1 WS
	5588100	cablabel S3 Pro 5 WS
	5588101	cablabel S3 Pro 10 WS
	5588150	cablabel S3 Pro 1 additional licence
	5588151	cablabel S3 Pro 4 additional licences
	5588152	cablabel S3 Pro 9 additional licences
	5588002	cablabel S3 Print 1 WS
	5588105	cablabel S3 Print 5 WS
	5588106	cablabel S3 Print 10 WS
	5588155	cablabel S3 Print 1 additional licence
	5588156	cablabel S3 Print 4 additional licences
	5588157	cablabel S3 Print 9 additional licences
	in preparation	cablabel S3 Print Server
11.10	9008486	Programming manual EN, printed copy

Scopes of delivery, designs and technical data correspond to the date of this publication. They are subject to change. Catalog data do not represent any warranty or guarantee.

## User languages

Language	Instructions	Control panel	Windows driver	Service manual	cablabel S3
<b>European Union</b>					
Bulgarian	X	X	X		X
Danish	X	X	X		
German	X	X	X	X	X
Estonian	X	X	X		
Finnish	X	X	X		
French	X	X	X		X
Greek	X	X	X		
English	X	X	X	X	X
Italian	X	X	X		X
Croatian	X	X	X		X
Latvian	X	X	X		
Lithuanian	X	X	X		
Dutch	X	X	X		
Polish	X	X	X		X
Portuguese	X	X	X		
Romanian	X	X	X		
Swedish	X	X	X		
Slovak	X	X	X		
Slowenian	X	X	X		
Spanish	X	X	X		X
Czech	X	X	X		X
Hungarian	X	X	X		
<b>Europe (Non-EU)</b>					
Macedonian	X	X	X		
Norwegian	X	X	X		
Russian	X	X	X		X
Serbian	X	X	X		
Turkish	X	X	X		
<b>Asia</b>					
Chinese (simplified)	X	X	X		X
Chinese (traditional)	X	X	X		X
Japanese	X		X		
Korean	X		X		X
Thai	X	X	X		
<b>Middle East</b>					
Persian		X			
Arabian		X			

# Overview of cab products



See product information on [www.cab.de/en](http://www.cab.de/en)



Germany  
**cab Produkttechnik GmbH & Co KG**  
Karlsruhe  
Phone +49 721 6626 0  
[www.cab.de](http://www.cab.de)

France  
**cab Technologies S.à.r.l.**  
Niedermodern  
Phone +33 388 722501  
[www.cab.de/fr](http://www.cab.de/fr)

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