

Status: 09/2024



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			●	●
Material ¹⁾				
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	46 - 176
	Height	mm at least	10	
	Thickness	mm max.	0.1	
Liner	Width	mm	24 - 120	50 - 180
	Thickness	mm	0.03 - 0.16	
Continuous	Width	mm	24 - 120	50 - 180
	Thickness	mm	0.03 - 0.5	
	Weight (cardboard)	g/m² max.	300	
Ribbon ²⁾	Color side		outside or inside	
	Roll diameter	mm max.	80	
	Core diameter	mm	25.4	
	Length	m max.	450	
	Width	mm max.	114	170
Printer dimensions, weights				
Width x Height x Depth		mm	248 x 395 x 554	358 x 395 x 554
Weight		kg	22	24
Label sensors, position indicators				
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	
Electronics				
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			■	
Interfaces				
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			□	

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

²⁾ A ribbon should be at least as wide as the liner material.

Technical data

■ standard □ option

Operating data			
Voltage		100-240 VAC, 50/60 Hz, PFC	
Consumption of power		<10 W in standby / 100 W in typical operation / max. 200W	
Temperature / humidity	Operation	+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	
Control panel			
Color LCD touchscreen		Diagonal	" 4.3
		Resolution Width x Height	px 272 x 480
Setup options			
	Print Labels Ribbon Tear off Cut Interfaces Error	Region: - Language - Country - Keyboard - Time zone Time Display: - Brightness - Power saving mode - Orientation Interpreter	
Status bar			
	Receive data Record datastream Warning to a ribbon ending SD memory card plugged USB stick plugged	WLAN Ethernet USB Slave Time	
Controls			
	Ribbon 1/2 - Winding - Prior warning - End of ribbon Running out of material	Print head 1/2 - Voltage - Temperature - open Peripheral error	
Test routines			
System diagnostics	upon startup, detection of print head included		
Information display, test printout, analysis	Status printout	Test grid	
	Fonts list	Label profile	
	List of units	List of events	
	WLAN status	Monitor mode	
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		
Fonts			
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	
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	

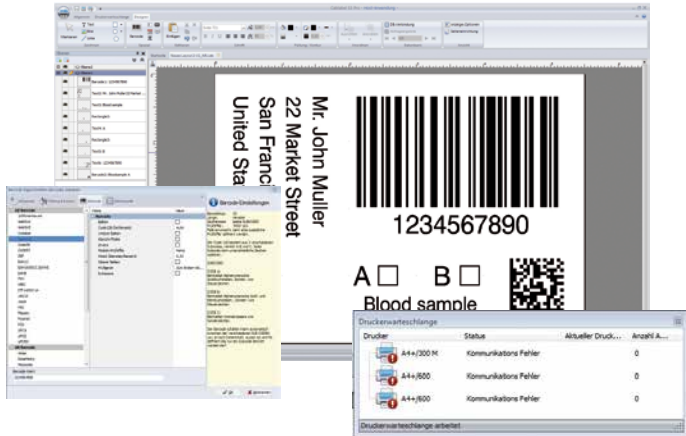
Fonts			
Bitmap	1 mm to 3 mm wide and high Zoom factors 2 to 10 0°, 90°, 180°, 270° orientations		
Vector / TrueType	0.9 mm to 128 mm wide and high Continuous zoom 360° orientation in steps of 1°		
Styles	bold, italic, underlined, outline, inverse - depending on the font type		
Character spacing	proportional or monospace		
Graphics			
Elements	lines, arrows, rectangles, circles, ellipses - filled or gradient		
Formats	PCX, IMG, BMP, TIF, MAC, GIF, PNG		
Codes			
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 All codes may vary in height, modular width and ratio. 0°, 90°, 180°, 270° orientations Feasibility of check digits, plain text printouts and start/stop coding depends on the type of code.		
Software			
Label software	cablabel S3 Lite cablabel S3 Viewer cablabel S3 Pro cablabel S3 Print		■ ■ □ □
Running also with	CODESOFT Loftware Spectrum NiceLabel BarTender		
Stand-alone operation			■
Windows printer drivers certified WHQL for	Windows 10 Windows 11	Server 2016 Server 2019 Server 2022	■
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:
www.cab.de/opensource

cablabel S3 software

Design, print, administrate

cablabel S3 opens up the full potential of cab devices. Defining a label is first. Modular design adapts cablabel 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/cablabel

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 cablabel 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 cablabel S3.



Free download on www.cab.de/en/support



Programming

JScript

cab printers embed JScript language. Download free manual on 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 SAP¹⁾ 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

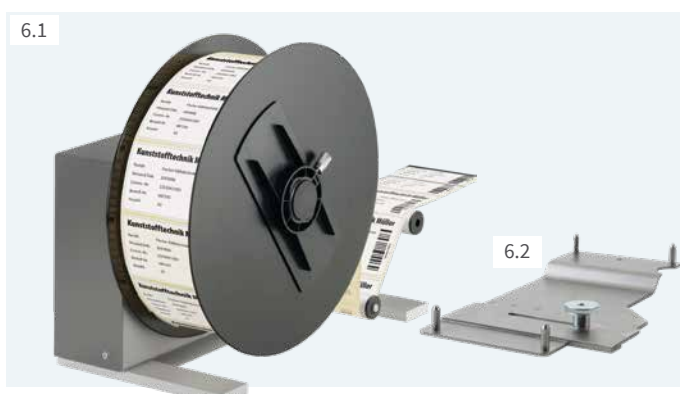
¹⁾ SAP and associated logos are trademarks or registered trademarks of SAP SE.

Accessories / optional equipment

2.1		SD memory card
2.2		USB stick
2.3		USB WLAN stick 2.4 GHz 802.11b/g/n Hotspot mode or infrastructure mode
2.4		USB WLAN stick with a rod antenna 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		I/O interface plug SUB-D, 25 pins, for connecting all control signals to the I/O interface

2.7		Digital I/O interface Labeling is triggered via a PLC, a sensor or a hand switch. Status reports and errors are displayed simultaneously.
2.8		Fanfold guide for XC Q4 and XC Q6.3 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/m² 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 rewriter	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	
Adapter kit	<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

xxxxxxx.250 options assembled

Wear parts

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

Provided online



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

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
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

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

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



See further accessories on
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
European Union					
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		
Slovenian	X	X	X		
Spanish	X	X	X		X
Czech	X	X	X		X
Hungarian	X	X	X		
Europe (Non-EU)					
Macedonian	X	X	X		
Norwegian	X	X	X		
Russian	X	X	X		X
Serbian	X	X	X		
Turkish	X	X	X		
Asia					
Chinese (simplified)	X	X	X		X
Chinese (traditional)	X	X	X		X
Japanese	X		X		
Korean	X		X		X
Thai	X	X	X		
Middle East					
Persian		X			
Arabic		X			

Overview of cab products

Label printers
MACH1, MACH2



Label printers
EOS 2



Label printers
EOS 5



Label printers
MACH 4S



Label printers
SQUIX 2



Label printers
SQUIX 4



Label printers
SQUIX 6.3



Label printers
SQUIX 8.3



Label printers
XD Q double-sided



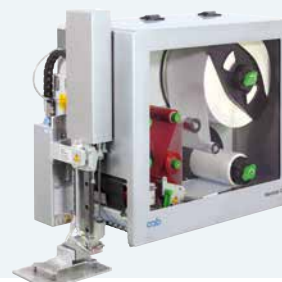
Label printers
XC two-colored



Print and apply systems
HERMES Q



Print and apply systems
Hermes C two-colored



Tube labeling systems
AXON 1



Print modules
PX Q



Labels and ribbons



Label software
cablabel S3



Label dispensers
HS, VS



Labeling heads
IXOR



Marking lasers
XENO 4



Laser marking systems



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