we identify more

Edition 1.0

SQUIX

Made in Germany

Contents

All information on scopes of delivery, design and technical specifications correspond to the date of the printing. Subject to change.

For current data see website www.cab.de/en/labelprinter

Label printers SQUIX for industrial application

SQUIX represent

- **innovative technology,**
- **easy operation,**
- **accuracy of impression,**
- **reliable and fast printing,**
- **compact, appealing design,**
- **highest quality standards.**

The professional industrial label printers SQUIX can be used in a wide variety of applications. Their development is foremost focused on simple and convenient operation coupled with high reliability.

The print mechanics and housings are made of high-quality materials and perfectly match in terms of shape and function. A wide range of peripherals and software enable specific customized solutions.

Regardless of whether they are operated in stand-alone mode, in a PC application or in a network – the solid SQUIX printers are always up to the mark. A high-speed processor ensures fast printing processes and immediate label output.

Sample applications:

PCB labels
If there is only little space available – smallest label size 4 x 4 mm

Type plates
Pin sharp 600 dpi fonts, graphics and barcodes

Cardboard box and pallet labels
Labels up to A6 format

Type overview SQUIX 4

Material guide left-aligned

1.1 Basic versions

For printing on labels and continuous materials, wound on rolls or fanfold. The material is torn off at the jagged tear-off edge. Optionally, it can be cut or externally rewound.

1.2 Dispensing versions P

In addition to the basic model the labels can be dispensed. The label is removed from the liner during the printing process. It can be removed manually or by applicator. Delivery includes I/O interface

Material guide centered

1.3 Basic versions M

For printing on all materials that are wound on rolls or reels resp. fanfold. Especially for very small labels and slim continuous materials such as pressed tubes. There is no need of adjusting the label width on the print head. Suitable print rollers are offered for small and thin materials.

1.4 Dispensing versions MP

In addition to the basic model the labels can be dispensed. The label is removed from the liner during the printing process. It can be removed manually or by applicator. Delivery includes I/O interface

With RFID write/read device

1.5 HF according to ISO/IEC 15693 with 13.56 MHz

1.6 UHF according to ISO/IEC 18000-6C/EPC Class 1 Gen 2

The Smart Labels are printed, the integrated RFID chip is tested and qualified with data. In case of an error the label is marked with a grid print. The write/read commands are implemented in the printer's native language JScript.

1.7 With separator MT

Preferred application with continuous and textile materials as well as pressed tubes. The transfer tape may stick with the textile tape after the printing. With a drive roller, the material is separated from the ribbon. In addition, the accuracy of impression is improved.

Technical details

Label printer
SQUIX 4 MP

1 Hinged cover
The two-part cover made of impact-proof plastics folds when opened. Only little footprint is needed. The large panoramic window allows to check the consumption of material and track the full printing process.

2 Solid metal chassis
Made of cast aluminum. All components are mounted on it.

3 Peel-off function
The label is removed from its liner via peel-off plate. High accuracy of printing and applying is achieved with the powered rewind assist and pinch rollers.

4 Peripheral connection
Add-on modules are easy to connect. All peripheral devices are plugged in the printer with two pins and fixed with a screw.

5 Ribbon holder
The three-part tightening axles enable a quick and easy exchange of ribbon.

6 Roll holder
The spring-mounted margin stop ensures constant tension during material feed, thus high accuracy of printing. For heavy rolls with core diameters of 76 or 100 mm an adapter is recommended.

7 Internal rewinder
With the rewinder labels or liners with or without a cardboard core can be rewound. The three-part tightening axle allows easy removal of the material.

8 Rocker
The resilient rocker with pulleys made of Teflon dampens the tension at print start, thus improving the accuracy of impression.

Operation panel

Intuitive and easy operation with self-explanatory symbols for configuration of the printer settings.

Display

1 **Power on**

2 **Head line**
These functions are displayed:
receive print data, record data stream, ribbon warning, USB stick, SD card, USB, LAN, WLAN, Bluetooth, time

3 **Status reports**
Ready, pause, number of printed label per print job, label in dispensing position, waiting for external start signal

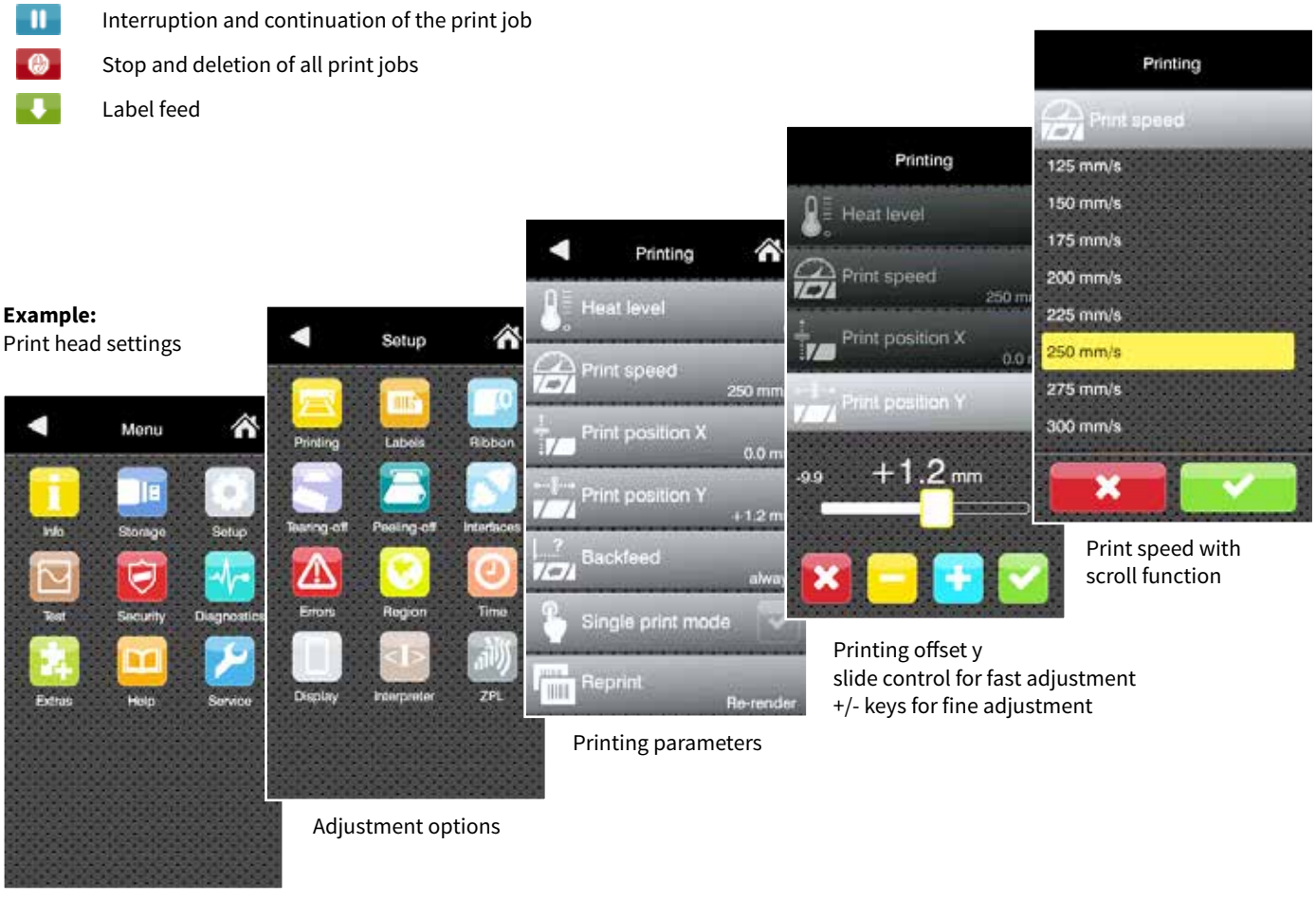
Buttons

4 For **options** with the following functions
Cutter/perforation cutter: direct cutting
External rewinder: winding inside and outside
Tear-off or peel-off mode: printing of the next label
Applicator: application of the label

5 **Operation**

- Jump to menu
- Repetition of the last label
- Interruption and continuation of the print job
- Stop and deletion of all print jobs
- Label feed

Example:
Print head settings



Menu selection

Adjustment options

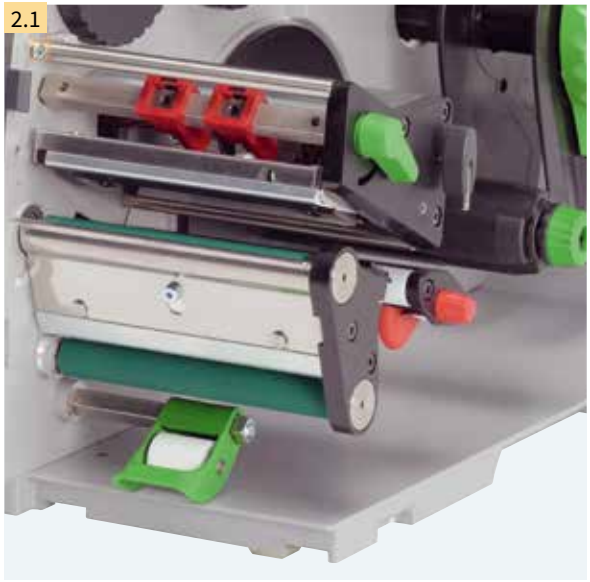
Printing parameters

Printing offset y
slide control for fast adjustment
+/- keys for fine adjustment

Print speed with scroll function

Print heads

2.1



All print heads are automatically detected and calibrated by the CPU. Major data like running performance, maximum operating temperature and heating energy are stored directly in the print head. The data can be read out at the plant.

Print heads type 4 - 300, 600 dpi
They have a particularly sharp-edge print image.
They are suitable for type plates with small fonts and graphics.
They are, amongst others, required for resin ribbons with high energy needs.

Print heads type 4.3 - 200, 300 dpi
They are recommended especially for direct thermal printing and application in rough surroundings.

Print rollers

2.2

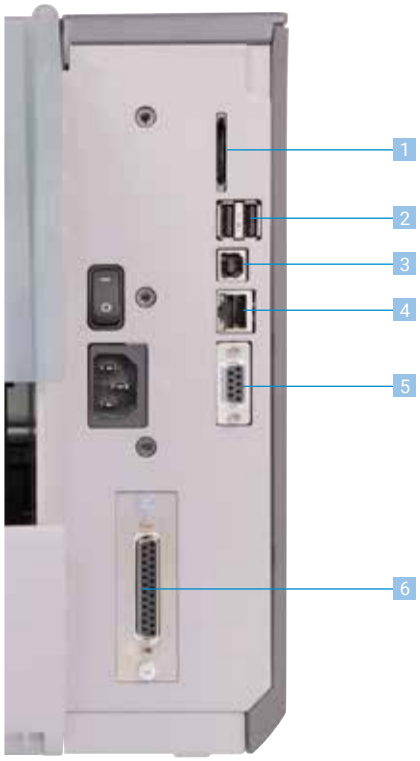
Two types of material are provided for the different applications:

Print rollers type DRK4 – synthetic rubber coating;
They are suitable for high accuracy of impression and are provided as standard.

In the case of centered material guidance slim print rollers are offered for slim materials.

Print rollers type DRS4 – silicone rubber coating;
They have an extra long service life with a higher tolerance of impression.

Interfaces



1 **Plug-in for SD card**

2 **2 x USB host interfaces**
for keyboard, barcode scanner, USB stick, Nano Bluetooth USB adapter

3 **USB 2.0 Hi-speed device** for PC connection

4 **Ethernet 10/100/1000 Base-T**

WLAN 802.11b, g, n, access point mode or station mode

5 **RS232C interface** 1.200 to 230.400 baud/8 bit

6 3.1 **I/O interface** standard with dispensing device, accessory to basic device
A PLC, a sensor or a hand switch start the labeling. At the same time, status and error messages are issued.

Compliant with IEC/EN 61131-2; all in- and outputs with galvanic isolation and reverse polarity protection, outputs in addition short circuit protected

Inputs	Outputs
Start printing and applying	Printer/applicator ready
Print first label	Print job available
Reprint	Applicator in basic position
Delete print job	Paper feed ON
Label dispensed	Label in dispensing position
Interrupt labeling	Applicator in applying position
Pause	Pre-warning end of ribbon
Reset	Common error

Technical data

■ Standard ☐ Option

Device type			Material guide	Left-aligned				Centered			
Type of print head				4.3	4.3	4	4	4.3	4.3	4	4
Printing method	Thermal transfer			–	–	■	■	–	–	■	■
	Direct thermal/thermal transfer			■	■	–	–	■	■	–	–
Printable resolution			dpi	203	300	300	600	203	300	300	600
Print speed			up to mm/s	250	250	300	150	250	250	300	150
Print width			mm	104	108.4	105.7	105.7	104	108.4	105.7	105.7
Printable area	Distance to locating edge	when left-aligned	mm	2.8	1.2	2.0	2.0	–	–	–	–
		when centered	mm	–				Centered on material			
Material[1]											
On roll or fanfold:	paper, cardboard, plastics PET, PE, PP, PI, PVC, PU, acrylate, Tyvec			■				■			
On roll or reel:	textile, pressed tubes, Smart Label			–				■			
Labels	Width[1]		mm	20 - 116				4 - 110			
	Height[1]		mm	6 - 2,000				4 - 2,000			
	Thickness		mm	0.03 - 0.60				0.03 - 0.60			
Liner material	Width		mm	24 - 120				9 - 114			
	Thickness		mm	0.03 - 0.13				0.03 - 0.13			
Continuous material	Width		mm	24 - 120				4 - 114			
	Thickness		mm	0.05 - 0.50				0.05 - 0.50			
	Weight (cardboard)		up to g/m²	300				300			
Pressed tube	Width ready-for-use		up to mm	–				114			
	Width continuous		mm	–				4 - 85			
	Thickness		up to mm	–				1.1			
Roll	Outer diameter		up to mm	205				205			
	Core diameter		mm	38.1 - 100				38.1 - 100			
Reel	Outer diameter		up to mm	–				205			
	Core diameter		mm	–				38.1 - 76			
	Outer width		mm	–				11 - 114			
Winding				Outside or inside				Outside or inside			
Ribbon[2]											
Ink side				Outside or inside							
Roll diameter			up to mm	80							
Core diameter			mm	25.4							
Variable length			up to m	450							
Width[2]			up to mm	25 - 114							
Internal rewinder with dispensing device											
Outer diameter			up to mm	142							
Core diameter			mm	38.1 - 40							
Winding				Outside							
Printer sizes and weight											
Width x Height x Depth			mm	252 x 288 x 460							
Weight			kg	10							
Label sensor with position indication											
Gap sensor				For label front edge or punch marks and end of material							
Reflective sensor from below (optionally from top)				For print mark front edge and end of material							
Distance sensor	to locating edge	Left-aligned	mm	5 - 60				–			
	from center to locating edge	Centered	mm	–				0 - 55			
Height of material passage		Standard	mm	2				2			
		Option	mm	4				4			
RFID											
Write/read device	HF ISO/IEC 15693, 13,56 MHz			–				☐			
	UHF ISO/IEC 18000-6C/EPC Class 1 Gen 2			–				☐			
Electronics											
Processor 32 bit clock rate			MHz	800							
Main storage (RAM)			MB	256							
Data storage (IFFS)			MB	50							
Plug-in for SD card (SDHC, SDXC)			up to GB	512							
Battery for time and date, real-time clock				■							
Data storage when power turned off (e. g. serial numbers)				■							
Acoustic signal				■							
Interfaces											
RS232C 1.200 to 230.400 baud/8 bit				■							
USB 2.0 Hi-speed Device for PC connection				■							
Ethernet 10/100/1000 Base-T				LPD, IPv4, IPv6, RawIP printing, DHCP, HTTP, FTP, SMTP, SNMP, TIME, NTP, Zeroconf, SOAP web service							
1 x USB host at the operation panel up to 500 mA				For service key or USB stick							
2 x USB host on the back of the device up to 500 mA				For keyboard, barcode scanner, USB stick, Nano Bluetooth USB adapter							
WLAN 802.11b, g, n, access point mode or station mode			GHz	2,4 ■/ 5 ☐							
Peripheral connection USB host, 24 DC				■							
Digital I/O with 8 in- and outputs		Dispensing/basic device		■/☐							

[1] Limitations may apply to small labels, thin materials or strong adhesives. These applications need to be tested and approved.
[2] Ribbon at least according to width of label material in order to avoid folding.

■ Standard ☐ Option

Operating data		
Power supply		100 - 240 VAC ~ 50/60 Hz, PFC
Power consumption		Standby < 10 W / typical 150 W / maximum 300 W
Temperature / humidity	Operation	0 - 40°C / 10 - 85% not condensing
	Storage	0 - 60°C / 20 - 85% not condensing
	Transport	–25 - 60°C / 20 - 85% not condensing
Approvals		CE, FCC class A, CB, CCC, UL

Operation panel	
	Touchscreen LCD color display
Screen diagonal	4.3"
Pixel W x H	272 x 480

Settings		
	Region: languages country keyboard time zone Print Dispense Cut Apply	Time/date Labels Ribbon Error handling Interpreter/emulation Interfaces

On display		
	Digital clock Data reception WLAN field intensity Ethernet status Bluetooth status	Data recording USB slave status Ribbon remaining USB stick plugged in SD card plugged in

Control		
	Ribbon direction of winding Ribbon pre-warning End of ribbon End of material Peripheral error	Print head tension Print head temperature Print head open Pinch roller open (with dispensing version and separator)

Testing	
System diagnosis	When device is switched on, including automatic print head detection
Information display, status printout, analysis	List of fonts, list of devices, WLAN status, label profile, test grid, monitor mode, print data recorded on memory card
Status reports	Printout of device settings, e. g. print length and runtime counter, machine status via software command, display of e. g. network errors - no link, barcode error, peripheral error etc.

Fonts	
Font types	5 bitmap fonts including OCR-A, OCR-B and 3 vector fonts Swiss 721, Swiss 721 bold and monospace 821 internally provided, TrueType fonts loadable
Character sets	Windows 1250 to 1257, DOS 437, 737, 775, 850, 852, 857, 862, 864, 866, 869, EBC DIC 500, ISO 8859-1 to -10 and -13 to -16, WinOEM 720, UTF-8, Macintosh Roman, DEC MCS, K0I8-R All Western and Eastern European characters, Latin, Cyrillic, Greek, Hebrew, Arabic, simplified Chinese and Thai characters are supported.
Bitmap fonts	Size in width and height 1 - 3 mm Zoom factor 2 - 10 Orientation 0°, 90°, 180°, 270°
Vector/ TrueType fonts	Size in width and height 0,9 - 128 mm Zoom factor freely adjustable Orientation 360° in steps of 1°
Font styles	Bold, italic, underlined, outline, inverse - depending on the font type
Character pitch	Variable or monospace for steady character pitches

Graphics	
Graphic elements	Lines, arrows, rectangles, circles, ellipses, filled and filled with fading
Graphic formats	PCX, IMG, BMP, TIF, MAC, GIF, PNG

Barcodes		
Linear barcodes	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 lead code of Deutsche Post AG Codabar JAN 8, 13 MSI Plessey Postnet RSS 14 UPC A, E, E0
2D and stacked codes	Aztec Codablock F DataMatrix PDF417 Micro PDF417 UPS MaxiCode QR code RSS 14 truncated, limited, stacked and stacked omnidirectional EAN/GS1 DataMatrix GS1 DataBar	
	All codes are flexible in height, modular width and ratio. Orientation 0°, 90°, 180°, 270° Options: check numbers, plain writing printout and start/stop code depending on type of code	

Software		
Programming	Direct programming with printer language JScript abc Basic Compiler Database Connector	■ ■ ■
Emulation	ZPL	■
Control/ administration	Printer control Administration Network Manager	■ ■
Label software	cablabel S3 Lite cablabel S3 Viewer cablabel S3 Pro cablabel S3 Print	■ ■ ☐ ☐
Also running with	CODESOFT NiceLabel EASYLABEL BarTender	
WHQL certified Windows printer drivers for	Windows Vista Windows 7 Windows 8 Windows 8.1 Windows 10 Server 2003 Server 2008 Server 2008 R2 Server 2012 Server 2012 R2	■
Apple Mac drivers	OS X printer drivers valid from version 10.6	■
Linux drivers	Valid from CUPS 1.2	■
Stand-alone operation		■

Accessories

Overview

● Typical ○ Possible ☐ Accessory

Pos.	Printer add-ons	Basic device	Dispensing device	Left-aligned	Centered	
1.5	RFID HF 13,56 MHz	●	●	–	☐	
1.6	RFID UHF 868/915 MHz	●	●	–	☐	
1.7	Separator S400	●	–	–	☐	
	Extra equipment					
2.2	Print rollers DRK4-25, DRK4-50, DRK4-80	●	●	–	☐	
	Print roller DRS4-120	●	●	☐	☐	
2.3	Antistatic brush	●	●	☐	☐	
2.4	Label sensor 2 (reflex from top)	●	●	☐	☐	
2.5	Label sensor 4	●	●	–	☐	
2.6	Adapter 100	●	●	☐	☐	
2.7	SD card 4 GB	●	●	☐	☐	
2.8	USB stick 4 GB	●	●	☐	☐	
2.9	USB WLAN stick 802.11b/g/n 2.4 GHz + a/n/ac 5 GHz	●	●	☐	☐	
2.10	Nano Bluetooth USB adapter	●	●	☐	☐	
2.11	Barcode tester for linear and 2D barcodes	●	●	☐	☐	
	Dispensing labels					
2.12	Present sensor PS800	–	●	☐	–	
2.13	Present sensor PS900	–	●	☐	☐	
2.14	Present sensor PS1000 MP	–	●	–	☐	
2.15	Extended peel-off plate DP410	–	●	☐	☐	
2.16	Product sensor	–	●	☐	☐	
	Interfaces					
3.1	I/O interface	●	●	☐	☐	
3.2	I/O interface connector, SUB-D 25 pin	●	●	☐	☐	
3.3	Label selection - I/O box	●	●	☐	☐	
	Connecting cable					
4.1	Connecting cable RS232 C, 9/9 pin, length 3 m	●	●	☐	☐	
	Cutting, perforating, stacking					
5.1	Cutter CU400 with cutter tray	●	○	☐	☐	
5.2	Perforation cutter PCU400	●	○	☐	☐	
5.3	Stacker with cutter and base frame ST400	●	○	–	☐	
	Rewinding, unwinding labels					
6.1	Rewind guide plate RG400	–	●	☐	☐	
6.2	External rewinder ER4200	●	○	☐	–	
6.3	External rewinder ER4300	●	○	☐	–	
6.4	External rewinder EU4390	●	●	☐	–	
	Applicators and modules for dispensing					
7.1-7.5	Applicator S1000	–	●	☐	☐	
7.6	All-around labeler	–	●	☐	☐	
7.7-7.9	Applicator S3200	–	●	☐	☐	
7.10	Dispensing module S5104	–	●	☐	–	
	Mounting equipment					
8.1	Mounting plate	–	●	☐	–	
8.2	Profile 40/80/120 mm	–	●	☐	–	
8.3	Base plate 500 x 255 mm	–	●	☐	–	
8.4	Floor stand 1600	–	●	☐	–	
8.5	Printer holder	–	●	☐	–	
	Further A+ series accessories					**Part no.**
	External rewinder ER1/210[1]	●	○	☐	–	**5948102.597**
	External rewinder ER4/210	●	○	☐	–	**5948100**
	External rewinder ER4/300	●	○	☐	–	**5946090**
	External unwinder EU4/300	●	●	☐	–	**5946091**
	Adapter kit for rewinders and unwinders[1]	●	●	☐	–	**5978943**
	Peel-off adapter PS5	–	●	☐	–	**5946120**
	Present sensor PS6	–	●	☐	–	**5942353**
	Pause adapter PS7	●	–	☐	☐	**5946146**
	Applicator A1000-220[1]	–	●	☐	–	**5949001.597**
	Applicator A1000-300[1]	–	●	☐	–	**5949002.597**
	Applicator A1000-400[1]	–	●	☐	–	**5949003.597**
	Applicator A3200[1]	–	●	☐	–	**5976050.597**
	Interface connector, SUB-D 15 pin	–	●	☐	–	**5917652**
	Hand switch TR1[2]	–	●	☐	–	**5942345**
	Foot switch[2]	–	●	☐	–	**5535901**
	Product sensor[2]	–	●	☐	☐	**5941526**
	Adapter screw M6/M4[1] SQUIX M6 to A4+/M4	●	●	☐	☐	**5977586.001**

[1] Adjusted to SQUIX. Adapter screw M6 on M4 to attach the external rewinder ER1/210, the applicators A1000 and A3200

[2] To be connected to PS5, PS6, PS7, A1000, A3200

Accessories

Extra equipment	
2.2 	**Print roller DRK4-25** Material width up to 25 mm; synthetic rubber coating for high accuracy of impression
	**Print roller DRK4-50** Material width up to 50 mm; synthetic rubber coating for high accuracy of impression
	**Print roller DRK4-80** Material width up to 80 mm; synthetic rubber coating for high accuracy of impression
	**Print roller DRS4-120** Material width up to 120 mm
2.3 	**Antistatic brush** Particularly in case of plastic materials electrostatics is discharged after printing.

Extra equipment	
2.4 	**Label sensor 2** Reflex from top in case of pressure bars on the material surface
2.5 	**Label sensor 4** Gap height 4 mm for special materials like pressed tubes
2.6 	**Adapter 100** For label rolls having a core diameter of 100 mm and an outer diameter larger 180 mm
2.7 	**SD card 4 GB**
2.8 	**USB stick 4 GB**
2.9 	**USB WLAN stick** 802.11b/g/n 2.4 GHz + 802.11a/n/ac 5 GHz
2.10 	**Nano Bluetooth USB adapter**

2.11 	**Barcode tester for linear and 2D barcodes** The accuracy of a horizontally and vertically printed barcode is tested by a camera directly after printing. In case of a faulty code the print job is stopped and the label can be removed. The barcode tester can be used in tear-off or dispensing mode or with an external rewinder. For further information see the operator's manual.
Dispensing labels	
2.12 	**Present sensor PS800** For dispensing devices with left-aligned material guide. The present sensor detects the label being in dispensing position. After the label has been removed the next label is automatically printed.
2.13 	**Present sensor PS900** For dispensing devices with left-aligned or centered material guide for example with circular labels whose trailing edges cannot be detected by the present sensors PS800 or PS1000 MP. After the label has been removed the next label is automatically printed.
2.14 	**Present sensor PS1000 MP** For dispensing devices with centered material guide. The present sensor detects the label being in dispensing position. After the label has been removed the next label is automatically printed.
2.15 	**Extended peel-off plate DP410** For labels with a strong adhesive or very thick liner material that make its removal difficult. Only in connection with printing on demand button on the operation panel or control signal.
2.16 	**Product sensor** For automatic product detection on the conveyor belt; range 200 mm for the reflective sensor
Interfaces	
3.2 	**I/O interface connector, SUB-D 25 pin** With screw clamps to connect all control signals to the I/O interface
3.3 	**Label selection - I/O box** From a master controller like PLC up to 32 different labels can be selected from the memory card. The I/O box allows to realize simple PLC control processes with four in- and outputs via abc programming.
Connecting cable	
4.1 	**Connecting cable RS232 C**, 9/9 pin, length 3 m

Accessories

5.1

5.2

5.3

Cutting, perforating, stacking

Cutter CU400
To cut paper labels, self-adhesive labels, cardboard, textile or plastic materials as well as pressed tubes.

Cutter tray
Up to approximately 50 labels can be collected in the cutter tray.

Cutter			CU400
Material	Width	up to mm	120
	Weight cardboard	gr/m²	60 - 300
	Thickness	mm	0.05 - 1.1
Cutting length		mm	> 5
Gap height		up to mm	2.5
Cuts		/min	120
Stop print job if			Final cutter position not reached
Cutter tray			
Label height		up to mm	100

Perforation cutter PCU400
Continuous materials like textile or pressed tubes are perforated in order to subsequently separate them manually.
In addition, the materials can also be cut.

Perforation cutter			PCU400
Material	Width	up to mm	85
	Weight cardboard	gr/m²	60 - 300
	Thickness	mm	0.05 - 1.1
Cutting length		mm	> 5
Gap height		up to mm	2.5
Cuts		/min	Cutting 120/perforating 150
Stop print job if			Final cutter position not reached
Perforating	Web width	mm	0.5
	Web distance	mm	2.5 or 10

Stacker with cutter ST400
Printed materials are cut and stacked. When the maximum stack height is reached, the print job is interrupted. With stiff or curved materials limitations may be possible. We recommend to have such applications tested at our plant. To place the devices on the table in any position.

Stacker with cutter			ST400
Material	Width	mm	20 - 100
	Weight cardboard	gr/m²	60 - 300
	Thickness	mm	0.05 - 0.8
Cutting length		mm	20 - 150
Gap height		up to mm	1.2
Cuts		/min	120
Stop print job if			Final cutter position not reached, paper jam, cover stacker open, stack height reached
Stack height		up to mm	100

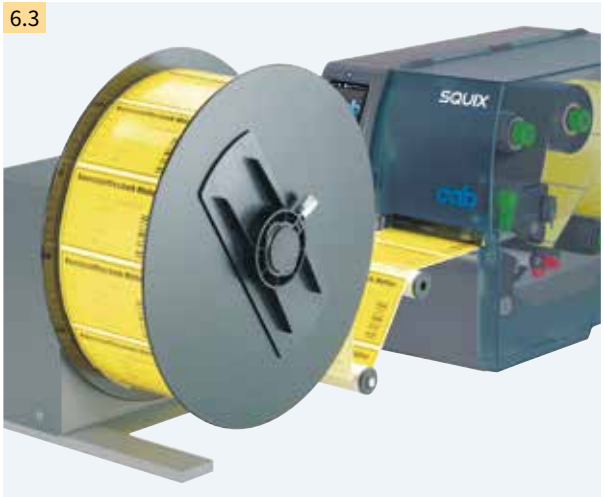
Storage table label W x H
Storage table and protective cover are adapted to the label size. They have to be ordered separately.

Accessories

6.1

6.2

6.3



6.4

Rewinding labels

with or without a cardboard core

Rewind guide plate RG400 for internal rewinder
Internal rewinding is for dispensing printers.
Thus, the peel-off plate is replaced by the rewind guide plate.

Rewind guide plate			RG400
	Material width	up to mm	120
	Roll diameter	up to mm	140
	Tightening axle for core diameter	mm	38.1 - 40
	Winding		Outside

External rewinder ER4200
The rewinder is screwed with the label printer. Labels are wound either inside or outside. The electronic swing arm control ensures consistent and tight winding.

External rewinder		ER4200
Material width	up to mm	120
Roll diameter	up to mm	205
Tightening axle for core diameter	mm	38.1 - 40
Winding		Outside or inside

External rewinder ER4300
The rewinder is screwed with the label printer. Labels are wound either inside or outside. The electronic swing arm control ensures consistent and tight winding.

External rewinder		ER4300
Material width	up to mm	120
Roll diameter	up to mm	300
Tightening axle for core diameter	mm	76
Winding		Outside or inside

Unwinding labels

External unwinder EU4390
Ensures consistent label feed with heavy rolls.
Both outside or inside wound rolls can be processed.

External unwinder			EU4390
Material width		up to mm	120
Roll diameter		up to mm	390
Core diameter		mm	38.1
	with adapter	mm	76
Winding			Outside or inside

Applicator S1000

7.1

Real-time labeling
The applicator S1000 combined with a SQUIX is a cost-effective solution for all dispensing printers in semi-automatic operation or when vertically integrated in a production line. The label is placed on the product with a stroke cylinder.

1 **Long service life**
The ball-bearing guides are low-wearing.

2 **Flexible product heights**
With the stroke cylinder labeling is possible at different heights. Different stroke lengths are available.

3 **Compressed air regulation unit**
Micro filters prevent from contamination. The compressed air regulator ensures a permanent high quality of labeling.

4 **High process reliability**
Supporting air jet stream, induction air and stroke speed are adjustable. For sensitive products and packaging the pressing force can be reduced to less than 10 N (1 kg). To avoid contamination, the vacuum holes are cleaned with air pressure after each labeling process.

5 **Label sizes**
Labels widths from 25 to 176 mm and heights from 25 to 200 mm can be processed.

6 **Supporting air**
Used for blowing the labels onto the pad

Pre-dispensing button
To test the labeling process. Pushing the button causes the label to be printed and held by the pad. Pushing the button again starts the labeling process.

Applicator		S1000-220	S1000-300	S1000-400
Cylinder stroke	mm	220	300	400
Tamp stroke below device	mm	64	144	244
Compressed air	bar	4.5		

Accessories

7.2

Tamps
The labels are applied to the tamp and held there by vacuum. Tamp and label are then moved to the product by the applicator.
Universal tamp pads
The rasterized vacuum holes are covered by a foul and pierced according to the label size.
Tamp pad
Manufactured according to the label size

Type		Universal tamp pads		Tamp pad	
		A1021	A1021	A1021	M1021
Material guide		Left aligned Centered	Left aligned Centered	Left aligned	Centered
Tamp surface W x H	mm	72 x 60	92 x 90	min. 72 x 60	
Label width	mm	25 - 70	25 - 90	25 - 116	
Label height	mm	25 - 60	25 - 90	25 - 200	
Product surface		Flat			
Product height		Variable			
Product during labeling		Not moving			

Accessories

Applicator S1000

7.3

Spring-mounted tamps
The spring deflection allows labeling even on inclined surfaces.
Universal tamp pads
The rasterized vacuum holes are covered by a foul and pierced according to the label size.
Tamp pad Manufactured according to the label size

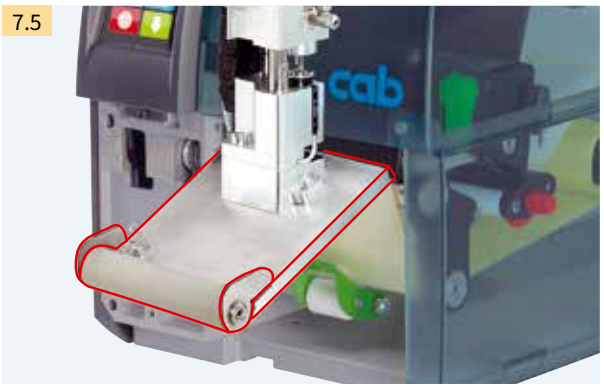
Type		Universal tamp pads		Tamp pad	
		A1321	A1321	A1321	M1321
Material guide		Left aligned Centered	Left aligned Centered	Left aligned	Centered
Tamp surface W x H	mm	116 x 102	116 x 152	min. 86 x 92	
Label width	mm	25 - 116	25 - 116	25 - 116	
Label height	mm	25 - 102	25 - 152	25 - 200	
Product surface		Flat			
Product height		Variable			
Product during labeling		Not moving			

7.4

Blow pad
In case of pressure-sensitive products the label can be blown on. Thus, the blow pad moves to a fixed height. The product to be printed is positioned about 10 mm below.

Blow pad		A2021	M2021
Material guide		Left aligned	Centered
Tamp surface W x H	mm	72 x 60	
Label width	mm	25 - 116	
Label height	mm	25 - 100	
Product surface		Flat	
Product height		Fixed	
Product during labeling		Not moving or in motion	

7.5



Roll-on pad
With the roll-on pad the label is moved right below the roll while printing. The pad moves to the product. The label is taken over by the product and rolled on during transport.

Roll-on pad		A1411
Material guide		Left aligned / Centered
Tamp surface W x H	mm	120 x 80
Label width	mm	25 - 116
Label height	mm	80 - 200
Product surface		Flat
Product height		Variable
Product during labeling		In motion

7.6

All-around labeler
With the applicator labels can be applied to cylindric objects around the entire 360° circumference. The product is put on the rolls and labeling is started via hand or foot switch.

Tamp pad		A1021	M1021
Material guide		Left aligned	Centered
Tamp surface W x H	mm	min. 72 x 60	
Label width	mm	25 - 116	
Label height	mm	25 - 140	
Product diameter	mm	12 - 40	
Product surface		Cylindrical	
Product during labeling		In rotary motion	

Applicator S3200

7.7

7.8 7.9

Real-time labeling
The applicator S3200 combined with a SQUIX is a cost-effective solution for all dispensing printers in semi-automatic operation or when vertically integrated in a production line. With the S3200 printed labels are automatically applied on a product. By means of a rotary cylinder the label is positioned 45° to 95° and placed on the product with a short stroke cylinder.

Information on service life, pre-dispensing, compressed air regulation unit, process reliability and supporting air correspond with the applicator S1000 (see page 14).

Applicator		S3200
Rotary cylinder		45° - 95°
Stroke cylinder	up to mm	30
Compressed air	bar	4.5

Tamp pads or blow pads are manufactured according to the label size.

		Tamp pad		Blow pad	
		A3200-1100	M3200-1100	A3200-2100	M3200-2100
Material guide		Left aligned	Centered	Left aligned	Centered
Tamp surface W x H min.	mm	72 x 60		72 x 60	
Label width	mm	20 - 116		20 - 116	
Label height	mm	5 - 80		10 - 80	
Product surface		Flat			
Product during labeling		Not moving		Not moving or in motion	

Dispensing module S5104

7.10

Dispensing module S5104
For labeling on packaging on a conveyor belt. The product sensor identifies the labeling position. Dispensing is started and at the same time the next label is printed. Conveyor belt speed and print speed have to be synchronized. A reflective sensor monitors the positioning.

Dispensing module		S5104
Material guide		Left aligned
Label width	mm	25 - 116
Label height	mm	25 - 200
Product surface		Flat
Product height		Fixed
Product during labeling		In motion, speed synchronized with the printer

Mounting equipment SQUIX 4

Mounting foot
To fasten the apply system and the product holder

1 **Mounting plate**
The apply system is fastened on the mounting plate.

2 **Profile**
Standard lengths 40, 80, 120 mm. The aluminum square profile can be manufactured in further lengths on request.

3 **Base plate**
To fasten the product holder
Standard size 500 x 255 mm

Floor stand
It enables the printer to be quickly and flexibly integrated in any production line. Height and width of the labeling position are easy to adjust in accordance with the product. Four guide rollers provide for mobility. The floor stand is adjusted with adjustable feet at the place of operation.

Floor stand		1600
Total height	mm	1,600
Labeling height	up to mm	1,400
Projection to center of label	mm	230 - 500
Chassis W x D x H	mm	600 x 860 x 140

Printer holder
The label printer is fixed on the mounting plate and quick-locked.

Software

Label software cablabel S3

It includes three functions:

• **design** • **print** • **monitoring**

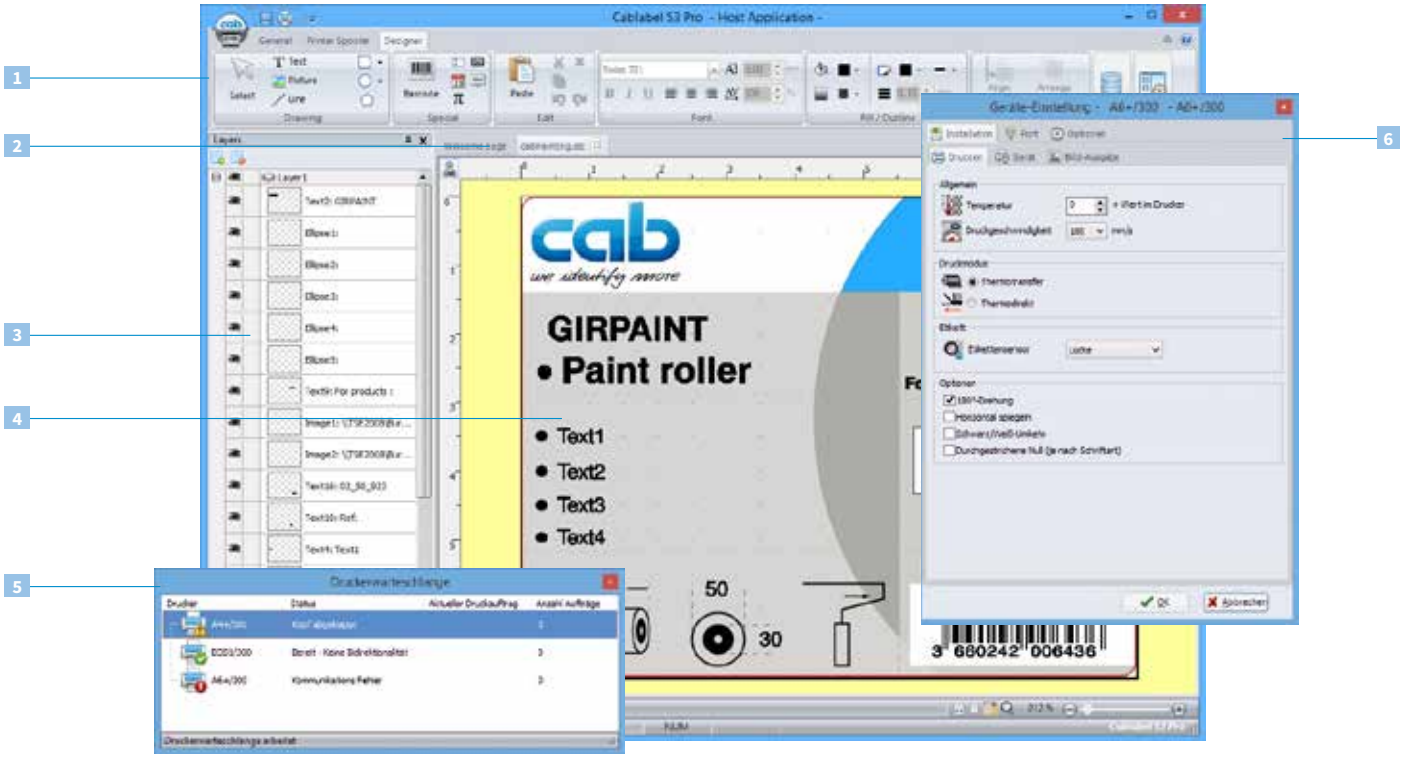
As regards design, cablabel S3 opens up the full potential of the cab devices. The intuitive user interface provides an extensive instruction set, for example different date formats, mathematical or logic functions.

At this, cablabel S3 connects all cab marking systems. First of all you design your label. Only when it comes to printing you have to decide whether the label shall be dispensed on a label printer, a print and apply system or a marking laser system.

Do you want your marking system to print labels in stand-alone mode? cablabel S3 supports again. After the label has been designed the program supplies all necessary data to be stored within the printer for stand-alone mode.

cablabel S3 is of modular design and can be adapted to your requirements step by step. To support functions like, for example, native programming with JScript, elements like the JScript viewer are embedded as plug-in. The designer user interface and the JScript code are synchronized in real time. Special functions like the Database Connector or barcode testers can be comfortably integrated.

For further information see www.cab.de/en/cablabel



1 Toolbar
Here you can create different objects for your labels.

2 Tabs
For fast navigation between several opened label layouts.

3 Layers
Help to manage different label objects.

4 Designer
Streamlined design by WYSIWYG display of the label.

5 Printer spooler
Monitors all print jobs and shows status of printers.

6 Drivers
With integrated hardware drivers you can manage settings and communication with devices.

Stand-alone operation

This operating mode is the ability of the printer to select and print labels even when the device is not connected to a host system.

The label layout is designed with a label software like the cablabel S3 or via direct programming with a text editor on a PC. Label formats, fonts, texts and graphics as well as database contents are stored and read on a SD card, a USB stick or the internal data storage IFFS.

Only variable data are sent to the printer via a keyboard, barcode scanner, weighing systems or other host computers. These data are recalled from the host via Database Connector and printed.

Printer drivers

For printer control with a software other than cablabel S3 cab provides drivers in 32/64 bit for operating systems Windows Vista, Mac OS 10.6 (or newer) and Linux with CUPS 1.2.

WHQL certified Windows®[1] printer drivers

Our printer drivers are certified and signed by Microsoft. They ensure optimum stability on your Windows operating system.

Apple Mac OS X®[2] driver

We provide a CUPS-based printer driver for programs using Mac OS X.

Linux drivers

Linux drivers are based on CUPS.

Printer drivers are available on the DVD delivered with your printer and for free download at www.cab.de/en/support

Database Connector

In stand-alone mode with network connection this program allows the printer to directly access data from a central ODBC- or OLEDB-ready database and have this data printed on the label. Simultaneously with the printing process, data can be rewritten to the database.

Programming

JScript

To control your printer we have developed the embedded programming language JScript.
The programming manual for free download at www.cab.de/en

abc Basic Compiler

In addition to JScript and as an integral firmware element the abc Basic Compiler allows advanced programming of the printer before the data are sent to editing for printout.
In this way, for example external printer languages can be replaced without interfering in the current print job. Or you integrate data from other systems like a scale, a barcode scanner or PLC.

Integration

Printer Vendor Program

As a silver level partner in SAP's Printer Vendor Program cab has developed the replace method allowing easy control of cab printers with SAPScript from SAP R/3. At this, the host system only sends variable data to the printer. Graphics and fonts that priorly have been stored locally (IFFS, SD card, etc.) are merged.

Step 1	Step 2	Step 3
Creation of labels and replace file with the cablabel S3 software	Implementation of replace file and replacement of variable data in SAPScript	Printout from SAP

[1] Windows is a registered trademark of Microsoft Corporation.

[2] MAC OS X is a registered trademark of Apple Computer, Inc.

[3] In preparation

Administration

Configuration in intranet und Internet

The HTTP and FTP server integrated in the printer via standard programs like web browser and FTP clients allows printer monitoring and configuration, firmware updates and memory card administration. The SNMP and SMTP client via email or SNMP datagram sends status, warning and error messages to administrators and users. Time and date are synchronized by a time server.

Network Manager[3]

The Network Manager enables to manage several printers simultaneously within a network. It supports one-stop control, configuration, firmware update, memory card administration, data synchronization and PIN administration.

Maintenance

Label sensor
The label sensor is unlocked and pulled out with finger pressure for cleaning.

Print head
The print head can be exchanged in few steps.
In general, adjustments and settings are not required.

Print roller
The print roller can be removed with a screw for cleaning or exchange.

Assembling tool
For replacing wear parts or peripheral mounting ONE tool is inserted at the printer ready to hand.

Service

Well-trained cab service engineers give worldwide support in maintenance and repair. Send your printer to a cab service center or a service partner selected by us. Your device will be checked and repaired within few workdays. If requested, a loan device is offered as a replacement during the time of repair.

You want maintenance and repair to be done in your company? Then make an appointment with our service department.

Contact: phone +49 721 6626 300, service.de@cab.de

Training

You enhance your knowledge of cab products for an effective use and gain valuable knowledge for the service and repair of the devices. At the Karlsruhe site, we offer training sessions on handling and operation, label design, software tools, printer drivers, programming, database connectivity, as well as for the integration in networks or a higher-level ERP systems. We will be happy to send you detailed information about the current training offering. Of course we also offer tailored trainings to your individual requirements - in Karlsruhe or at your site.

Product range

Label printers

Pos.		Part no.	Devices
1.1		5977014	Label printer SQUIX 4.3/200
		5977015	Label printer SQUIX 4.3/300
		5977001	Label printer SQUIX 4/300
		5977002	Label printer SQUIX 4/600
1.2		5977016	Label printer SQUIX 4.3/200P
		5977017	Label printer SQUIX 4.3/300P
		5977004	Label printer SQUIX 4/300P
		5977005	Label printer SQUIX 4/600P
1.3		5977018	Label printer SQUIX 4.3/200M
		5977019	Label printer SQUIX 4.3/300M
		5977010	Label printer SQUIX 4/300M
		5977011	Label printer SQUIX 4/600M
1.4		5977022	Label printer SQUIX 4.3/200MP
		5977023	Label printer SQUIX 4.3/300MP
		5977007	Label printer SQUIX 4/300MP
		5977008	Label printer SQUIX 4/600MP
		Part no.	**Special devices**
1.5		**5977xxx.102**	**Printer with RFID HF, basic and dispensing version with centered material guide** Label printer SQUIX x/xxxM-RFID/HF Label printer SQUIX x/xxxMP-RFID/HF "x" - choose device from Pos. 1.3/1.4
1.6		**5977xxx.120**	**Printer with RFID UHF, basic and dispensing version with centered material guide** Label printer SQUIX x/xxxM-RFID/UHF Label printer SQUIX x/xxxMP-RFID/UHF "x" - choose device from Pos. 1.3/1.4
1.7		**5977xxx.355**	**Printer with separator, basic version with centered material guide** Label printer SQUIX x/xxxMT "x" - choose device from Pos. 1.3

Scope of delivery: Label printer, power cable type E+F, length 1,8 m
connecting cable USB, length 1,8 m
operator's manual de/en

DVD: Operator's manual in more than 20 languages
configuration manual de/en/fr
service manual de/en
spare parts list de/en
programming manual en
WHQL certified Windows printer drivers for

Windows Vista	Server 2003
Windows 7	Server 2008
Windows 8	Server 2008 R2
Windows 8.1	Server 2012
Windows 10	Server 2012 R2

Apple Mac OS X drivers de/en/fr
Linux drivers de/en/fr
Label software cablabel S3 Lite
cablabel S3 Viewer
Database Connector

Wear parts

Pos.		Part no.	Print heads
2.1		5977382.001	Print head 4.3/200
		5977383.001	Print head 4.3/300
		5977444.001	Print head 4/300
		5977380.001	Print head 4/600
		Part no.	**Print and rewind assist rollers**
2.2		5953700.001	Print roller DRK4-25
		5953701.001	Print roller DRK4-50
		5953702.001	Print roller DRK4-80
		5954180.001	Print roller DRK4-120
		5954183.001	Rewind assist roller RRK4-120
		5954985.001	Print roller DRS4-120

Accessories

Pos.		Part no.	Extra equipment
2.3		5977339.001	Antistatic brush
2.4		5977590.001	Label sensor 2
2.5		5977530.001	Label sensor 4
2.6		5959622.001	Adapter 100
2.7		5977370	SD card 4 GB
2.8		5977730	USB stick 4 GB
2.9		5977731	USB WLAN stick 802.11b/g/n 2.4 GHz + a/n/ac 5 GHz
2.10		5977732	Nano Bluetooth USB adapter
2.11		5978911	Barcode tester for linear and 2D barcodes
		Part no.	**Dispensing labels**
2.12		5977585	Present sensor PS800
2.13		5977538	Present sensor PS900
2.14		5977735	Present sensor PS1000 MP
2.15		5978908.001	Extended peel-off plate DP410
2.16		5978909	Product sensor

Accessories

Pos.		Part no.	Interfaces
3.1		5977369.001	I/O interface
3.2		5917651	I/O interface connector SUB-D 25 pin
3.3		5948205	Label selection - I/O box
		Part no.	**Connecting cable**
4.1		5550818	Connecting cable RS232 C 9/9 pin, length 3 m
		Part no.	**Cutting, perforating, stacking**
5.1		5978900	Cutter CU400 with cutter tray
5.2		5978901 5978920	Perforation cutter PCU400/2.5 Perforation cutter PCU400/10
5.3		5978902	Stacker with cutter and base frame ST400
		5xxxxx*	Storage table ST400, label W x H
		Part no.	**Rewinding, unwinding labels**
6.1		5978903.001	Rewind guide plate RG400
6.2		5978904	External rewinder ER4200
6.3		5978905	External rewinder ER4300
6.4		5978907	External unwinder EU4390
		Part no.	**Applicators and dispensing modules**
7.1		5976086 5976087 5976088	Applicator S1000-220 Applicator S1000-300 Applicator S1000-400
7.2		5949072	Universal tamp pad A1021 70 x 60
		5949075	Universal tamp pad A1021 90 x 90
		59xxxxx* 5977xxx*	Tamp pad A1021 W x H Tamp pad M1021 W x H
7.3		5949076	Universal tamp pad A1321 116 x 102
		5949077	Universal tamp pad A1321 116 x 152
		59xxxxx* 5977xxx*	Tamp pad A1321 W x H Tamp pad M1321 W x H

Pos.		Part no.	Applicators and dispensing modules
7.4		59xxxxx* 5977xxx*	Blow pad A2021 W x H Blow pad M2021 W x H
7.5		59xxxxx* 5977xxx*	Roll-on pad A1411 W x H Roll-on pad M1411 W x H
7.6		5976084	All-around labeler
7.7		5976085	Applicator S3200
7.8		59xxxxx* 5977xxx*	Tamp pad A3200-1100 W x H Tamp pad M3200-1100 W x H
7.9		59xxxxx* 5977xxx*	Blow pad A3200-2100 W x H Blow pad M3200-2100 W x H
7.10		5976083	Dispensing module S5104
		Part no.	**Mounting equipment**
8.1		5978910	Mounting plate
8.2		5958365 5965929 5971136	Profile 40 Profile 80 Profile 120
8.3		5961203	Base plate 500 x 255
8.4		5947400	Floor stand 1600
8.5		5978922	Printer holder
		Part no.	**Label software**
11.7		5588000 5588001 5588100 5588101 5588150 5588151 5588152 5588002 5588105 5588106 5588155 5588156 5588157 In preparation	cablabel S3 Lite cablabel S3 Pro 1 WS cablabel S3 Pro 5 WS cablabel S3 Pro 10 WS cablabel S3 Pro 1 additional licence cablabel S3 Pro 4 additional licences cablabel S3 Pro 9 additional licences cablabel S3 Print 1 WS cablabel S3 Print 5 WS cablabel S3 Print 10 WS cablabel S3 Print 1 additional licence cablabel S3 Print 4 additional licences cablabel S3 Print 9 additional licences cablabel S3 Print Server
1110		9009950	Programming manual en, printed copy

* User specific part no. following request

Product overview

Label printers MACH1/2
in the lower price segment

Label printers MACH4
where little space is available

Label printers EOS1
desktop device for label rolls
up to diameter 155 mm

Label printers EOS4
desktop device for label rolls
up to diameter 210 mm

Label printers A2+
industrial device
up to print width 57 mm

Label printers SQUIX
industrial device
up to print width 108 mm

Label printers A6+
industrial device
up to print width 168 mm

Label printers A8+
industrial device
up to print width 216 mm

Label printers XD4T
for double-sided printing

Label printers XC
for two-color printing

Print and apply systems Hermes+
for automation

Print and apply systems Hermes C
for two-color printing and applying

Print modules PX
to be integrated
in automatic labeling systems

Labels
of more than 400 materials

Ribbons
in wax, resin and resin/wax qualities

Label software cablabel S3
Design, print, monitoring

Label dispensers HS/VS
for horizontal or
vertical dispensing

Labeling heads IXOR
to be integrated
in labeling machines

Marking lasers FL+
with output powers 10 to 50 watt

Laser marking systems
for industrial solutions

Headquarters and fabrication in Germany

to International subsidiaries

There are further 820 distribution partners in more than 80 countries.

Europe

Germany
cab Produkttechnik
GmbH & Co KG
Wilhelm-Schickard-Str. 14
76131 Karlsruhe
phone +49 721 6626 0
fax +49 721 6626 129
info@cab.de
www.cab.de

France
cab Technologies S.à.r.l.
2a Rue de la Moder
Z.A. Nord du Val de Moder
67350 Niedermodern
phone +33 388 722501
fax +33 388 722502
info.fr@cab.de
www.cab.de/fr

America

USA
cab Technology, Inc.
87 Progress Avenue Unit 1
Tyngsboro, MA 01879
phone +1 978 649 0293
fax +1 978 649 0294
info.us@cab.de
www.cab.de/us

Latin America
Alejandro Balmaceda
Hacienda Jurica Pte 1615
Colonial de Valle
32553 Juárez, Mexico
phone +52 656 682 3745
fax +52 656 682 4301
a.balmaceda@cab.de
www.cab.de/es

Asia

Taiwan
cab Technology Co., Ltd.
希愛比科技股份有限公司
16F-1, No. 700, Jhong Jheng Rd
Junghe, Taipei 23552
phone +886 (02) 8227 3966
fax +886 (02) 8227 3566
info.asia@cab.de
www.cab.de/tw

China
cab (Shanghai) Trading Co., Ltd.
铠博(上海)贸易有限公司
A507, No. 268, Tong Xie Rd
Shanghai 200335
phone +86 (021) 6236 3161
fax +86 (021) 6236 3162
info.cn@cab.de
www.cab.de/cn

cab (Shanghai) Trading Co., Ltd.
铠博(上海)贸易有限公司
Room 39, 10F, 8 Lin He Zhong Rd
Tian He District, Guangzhou 510610
phone +86 (020) 2831 7358
info.cn@cab.de
www.cab.de/cn

Africa

South Africa
cab Technology (Pty) Ltd.
14 Republic Street
Bordeaux
2125 Randburg
phone +27 11 886 3580
fax +27 11 789 3913
info.za@cab.de
www.cab.de/za

Status: 10/2016