cab
we identify more

Edition 2.0

SQUIX

cab

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/squix

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Label printers SQUIX for industrial application

SQUIX are the further development of the successful A$^+$ printers.

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. For small materials adapted print rollers are offered.

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 in preparation

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

When using Smart Labels, the integrated RFID chips are tested and qualified with data before printing. In case of an error the label is marked. To get good results in both writing and reading even when small labels are processed, the antenna position is centered just above the transponder.

1.7 Basic versions with separator MT
for continuous textile materials

Because of high heat energy while printing and the electrostatic charge of the materials the ribbon may stick with the textile tape. A separator guarantees reliable separation. It is recommended to select the print roller according to the maximum width of the textile tape resp. ribbon.

Technical details
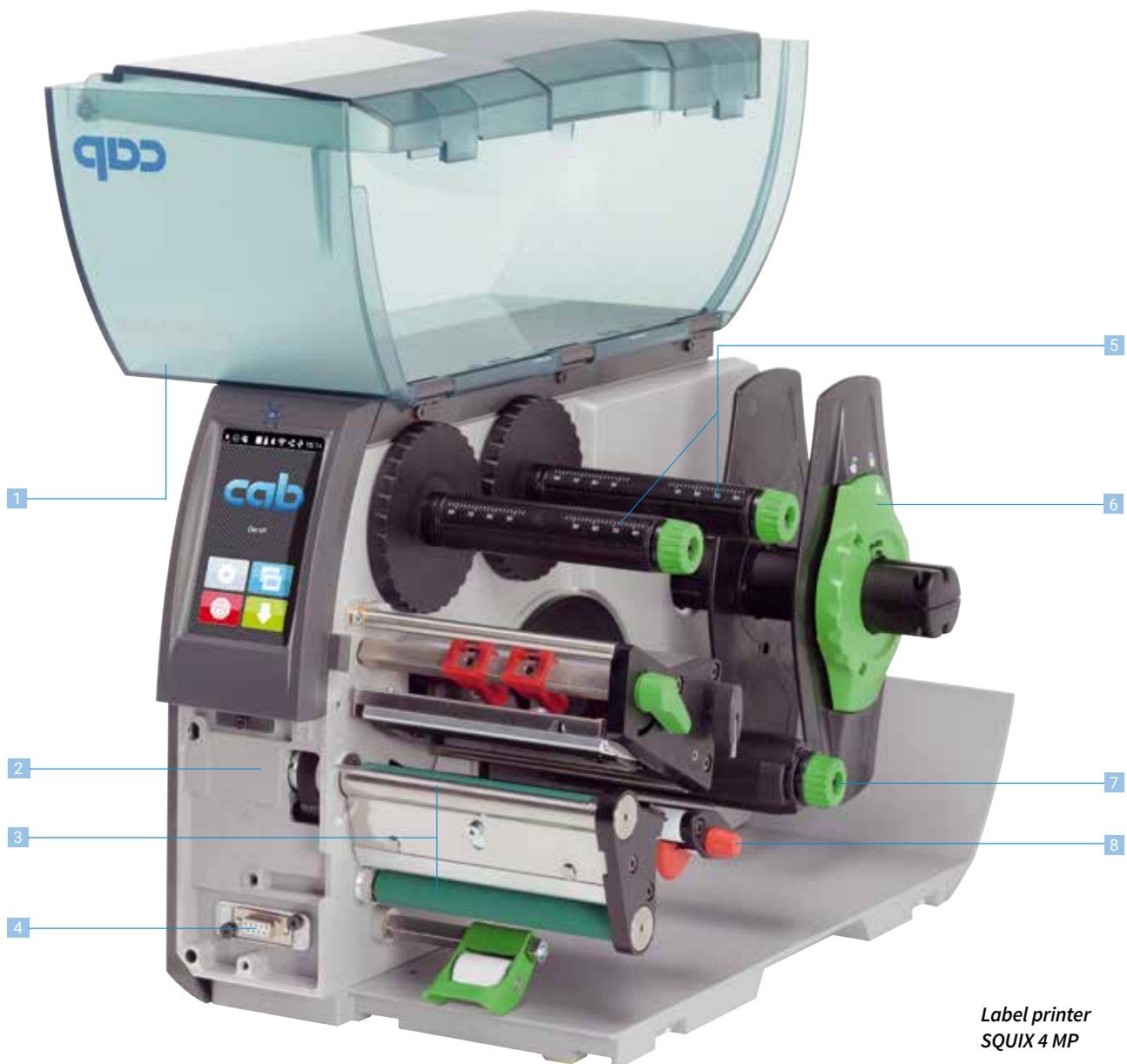
*Label printer
SQUIX 4 MP*

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   **Headline**
These functions are displayed:
receive print data, record data stream, ribbon warning,
USB memory stick, SD memory 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

USB plug-in / USB WLAN stick

6   For the **service key** or a **memory stick**,
to load data into the IFFS storage

7   **USB WLAN stick** 802.11b/g/n 2.4 GHz
included as an extra item in the scope of delivery

Example:
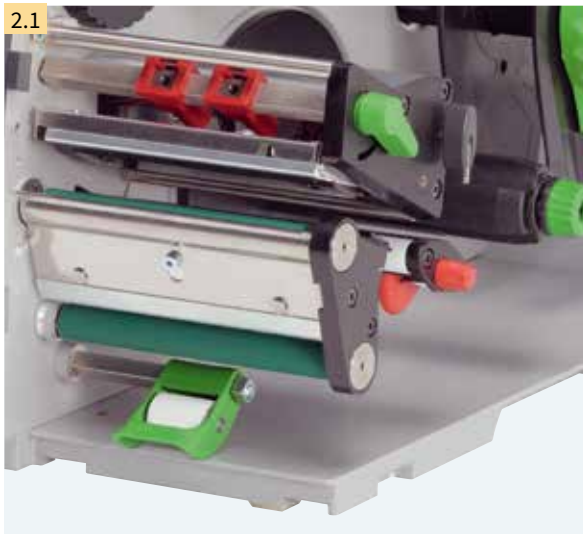Print head settings

Menu selection

Setup options

Printing parameters

Print position Y
slide control for fast adjustment
± keys for fine adjustment

Print speed with
scroll function

6

Print heads

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
With 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

Two types of material are provided for the different applications:

Print rollers DR4 – synthetic rubber coating;
They are suitable for high accuracy of impression and are provided as standard.

Print rollers DR4 M25/50/80 – synthetic rubber coating;
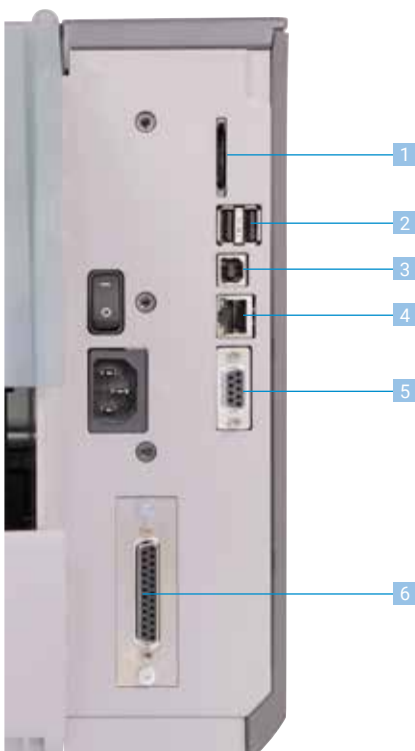In the case of centered material guidance slim print rollers are needed for slim materials and ribbons. In this way, wear of print rollers, contamination of print heads and errors in material feed are avoided.

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

Interfaces
on the back of the device

1. **Plug-in for SD memory card**

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

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

4. **Ethernet 10/100 BASE-T**

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, type 1+3;
   all in- and outputs with galvanic isolation and reverse polarity protection, outputs in addition short circuit protected

Inputs PNP	Outputs PNP, NPN on request
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

● Typical ○ Possible ■ 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			●	●	○	○	●	●	○	○
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, ready-for-use tubes, plastics PET, PE, PP, PI, PVC, PU, acrylate, Tyvec					●				●	
On roll, reel or fanfold:	pressed continuous tubes, textile, Smart Labels					–				●	
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		120				114		
	Width continuous		mm		–				4 - 85		
	Thickness		up to mm		1.1				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 or 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			mm		2				2		
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 memory 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)							■				
USB WLAN stick 802.11b/g/n 2.4 GHz							■ (included as extra item in scope of delivery)				
Interfaces											
RS232C 1.200 to 230.400 baud/8 bit							■				
USB 2.0 Hi-speed Device for PC connection							■				
Ethernet 10/100 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 for 1 x USB host at the operation panel for							Service key or USB memory stick USB WLAN stick 802.11b/g/n 2.4 GHz				
2 x USB host on the back of the device for							Keyboard, barcode scanner, USB memory stick, USB Bluetooth adapter, USB WLAN stick 802.11b/g/n 2.4 GHz + a/n/ac 5 GHz with rod antenna				
WLAN 802.11b, g, n, access point 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.

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, cUL

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

Settings	

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

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

Control	
	Ribbon direction of winding Print head tension Ribbon pre-warning Print head temperature End of ribbon Print head open End of material Pinch roller open Peripheral error (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 Server 2003 Windows 7 Server 2008 Windows 8 Server 2008 R2 Windows 8.1 Server 2012 Windows 10 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		■

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 DR4-M25, DR4-M50, DR4-M80	●	●	–	□
	Print roller DRS4	●	●	□	□
2.3	Antistatic brush	●	●	□	□
2.6	Adapter 100	●	●	□	□
2.7	SD memory card 8 GB	●	●	□	□
2.8	USB memory stick 8 GB	●	●	□	□
2.9	USB WLAN stick 802.11b/g/n 2.4 GHz + a/n/ac 5 GHz	●	●	□	□
2.10	USB Bluetooth 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	–	●	–	□
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	Basic device	Dispensing device	Left-aligned	Centered	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 DR4-M25** Material width up to 25 mm; synthetic rubber coating for high accuracy of impression
		Print roller DR4-M50 Material width up to 50 mm; synthetic rubber coating for high accuracy of impression
		Print roller DR4-M80 Material width up to 80 mm; synthetic rubber coating for high accuracy of impression
		Print roller DRS4 Material width up to 120 mm
2.3		**Antistatic brush** Particularly in case of plastic materials electrostatics is discharged after printing.

Extra equipment		
2.6		**Adapter 100** For label rolls having a core diameter of 100 mm and an outer diameter larger 180 mm
2.7		**SD memory card 8 GB**
2.8		**USB memory stick 8 GB**
2.9		**USB WLAN stick** 802.11b/g/n 2.4 GHz + 802.11a/n/ac 5 GHz in station mode with rod antenna for extended reach
2.10		**USB Bluetooth 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** 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. A present sensor cannot be used.
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

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/m^2	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/m^2	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/m^2	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
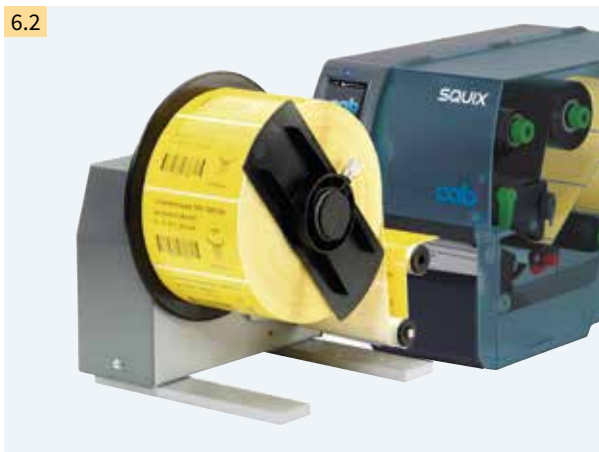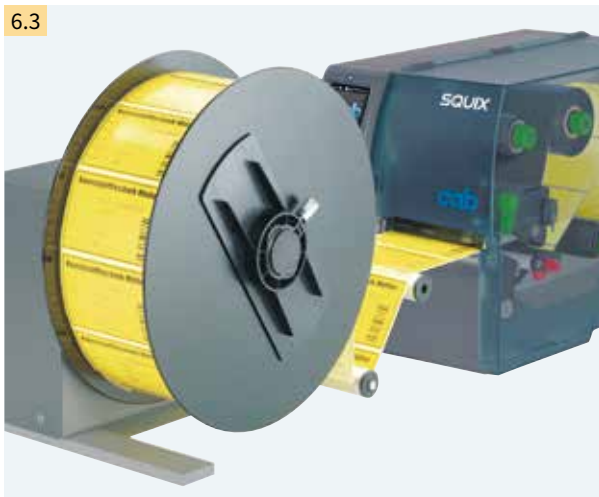
Rewinding labels
with or without a cardboard core

6.1

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

6.2

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

6.3

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

6.4

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

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

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

7.4

7.5

7.6

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			

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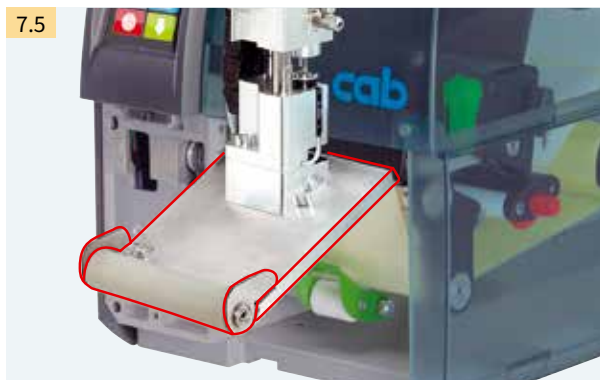
Roll-on pad
With the roll-on pad the label is moved right below the roll while printing.
The pad moves to the product. The label is taken over by the product
and rolled on during transport.

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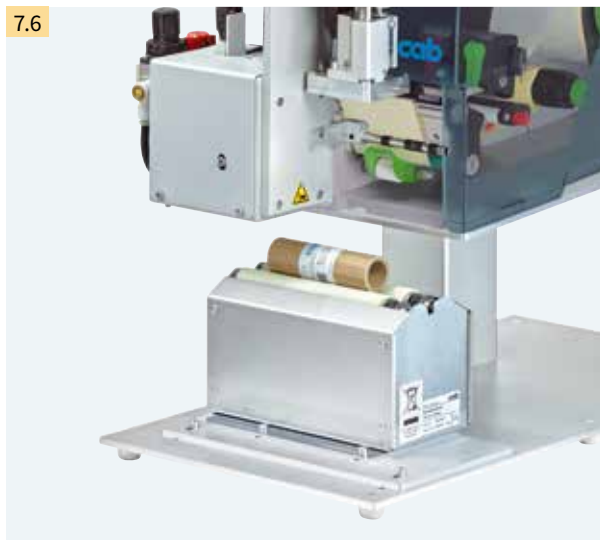
All-around labeler
With the applicator labels can be applied to cylindric objects
around the entire 360° circumference. The product is put on the rolls
and labeling is started via hand or foot switch.

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
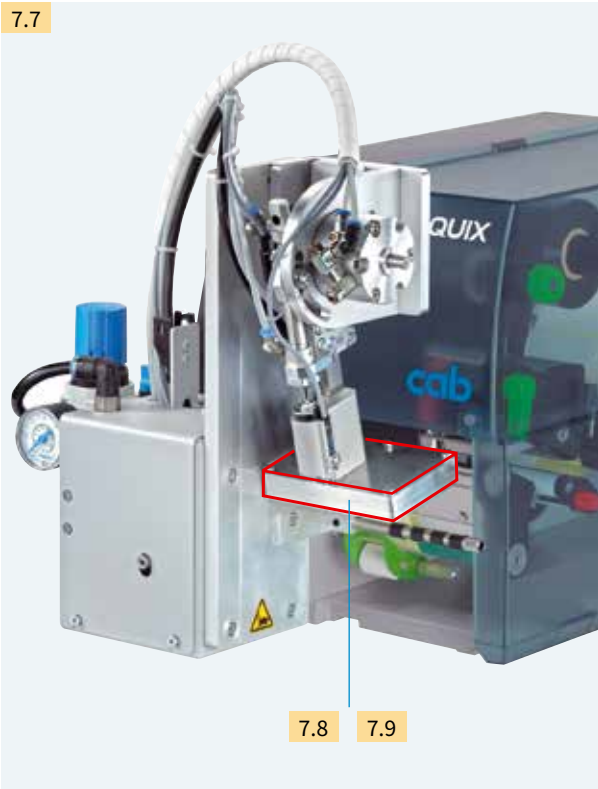
Real-time labeling

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° to the horizontal 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
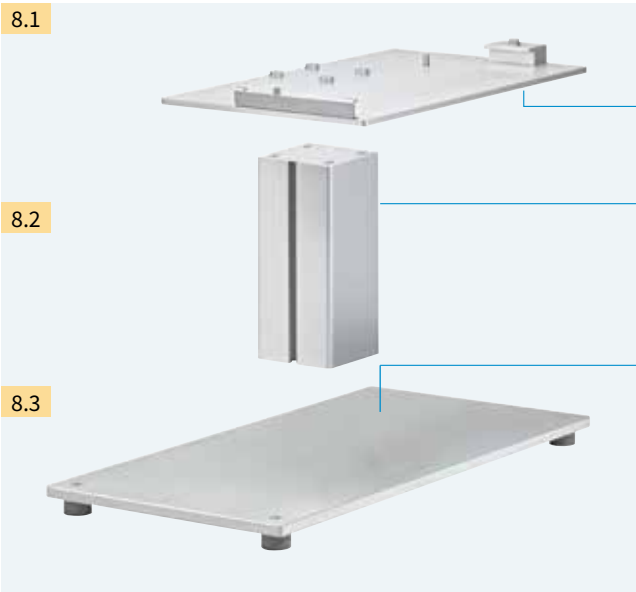
Mounting foot
To fasten the apply system and the product holder

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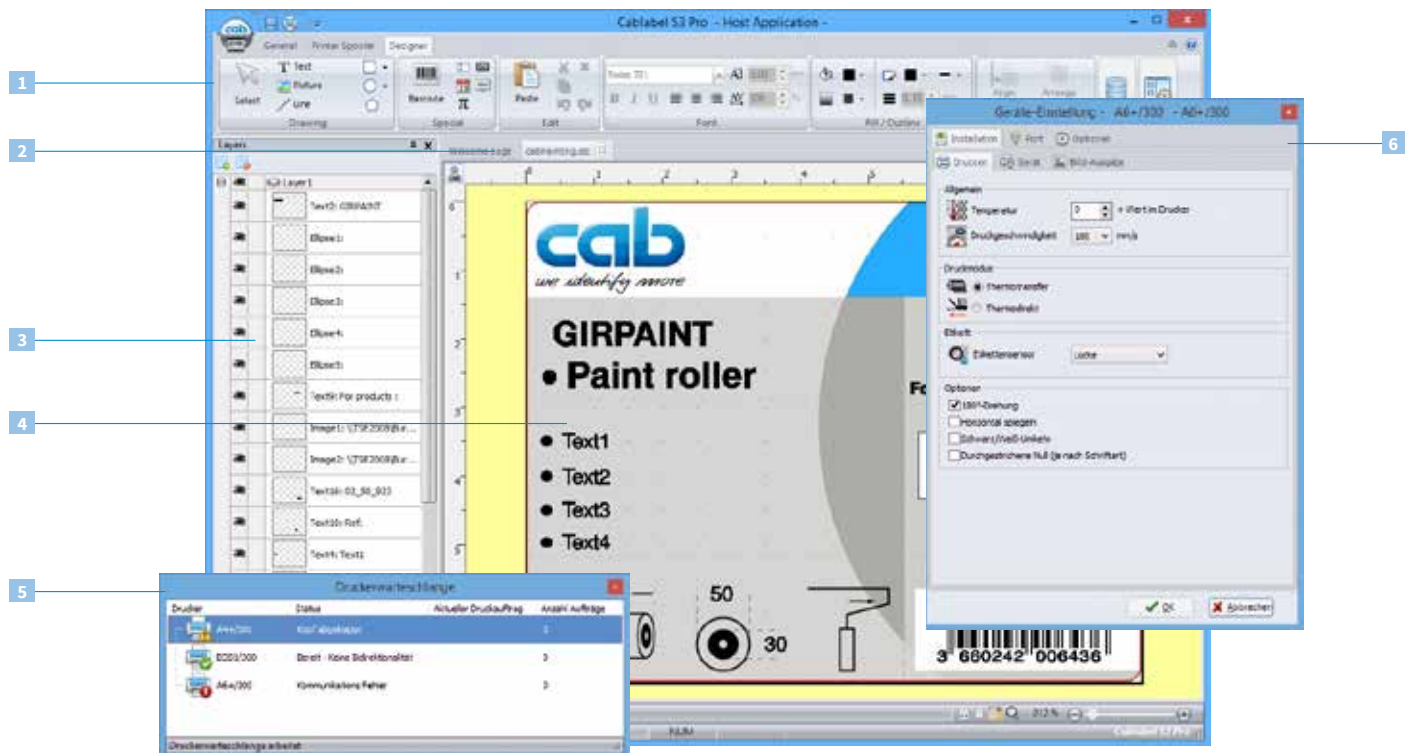
1 Toolbar
Here you can create different objects for your labels.

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 memory card, a USB memory 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 memory 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
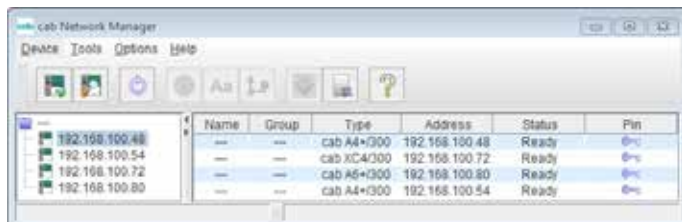
Administration

Configuration in intranet and 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 hand-
ling 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 require-
ments - 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

Pos.		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
USB WLAN stick 802.11b/g/n 2.4 GHz
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

Pos.		Part no.	Print and rewind assist rollers
2.2		5953700.001	Print roller DR4-M25
		5953701.001	Print roller DR4-M50
		5953702.001	Print roller DR4-M80
		5954180.001	Print roller DR4
		5954183.001	Rewind assist roller RR4
		5954985.001	Print roller DRS4

Accessories

Pos.		Part no.	Extra equipment
2.3		5977339.001	Antistatic brush
2.6		5959622.001	Adapter 100
2.7		5977370	SD memory card 8 GB
2.8		5977730	USB memory stick 8 GB
2.9		5977731	USB WLAN stick 802.11b/g/n 2.4 GHz + a/n/ac 5 GHz
2.10		5977732	USB Bluetooth adapter
2.11		5978911	Barcode tester for linear and 2D barcodes

Pos.		Part no.	Dispensing labels
2.12		5977585	Present sensor PS800
2.13		5977538	Present sensor PS900
2.14		5977735	Present sensor PS1000
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

Pos.		Part no.	Connecting cable
4.1		5550818	Connecting cable RS232 C 9/9 pin, length 3 m

Pos.		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
		5xxxxxx*	Storage table ST400, label W x H

Pos.		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

Pos.		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

Pos.		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

Pos.		Part no.	Label software
11.7		5588000	cablabel S3 Lite
		5588001 5588100 5588101 5588150 5588151 5588152	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
		5588002 5588105 5588106 5588155 5588156 5588157	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
		In preparation	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
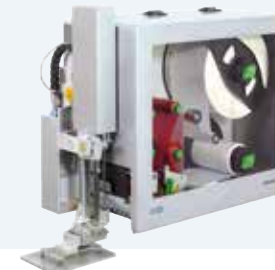
Print modules PX
to be integrated
in automatic labeling systems

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

- ② to ⑦ International subsidiaries

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

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