

## Baumer hhs – Your competent partner

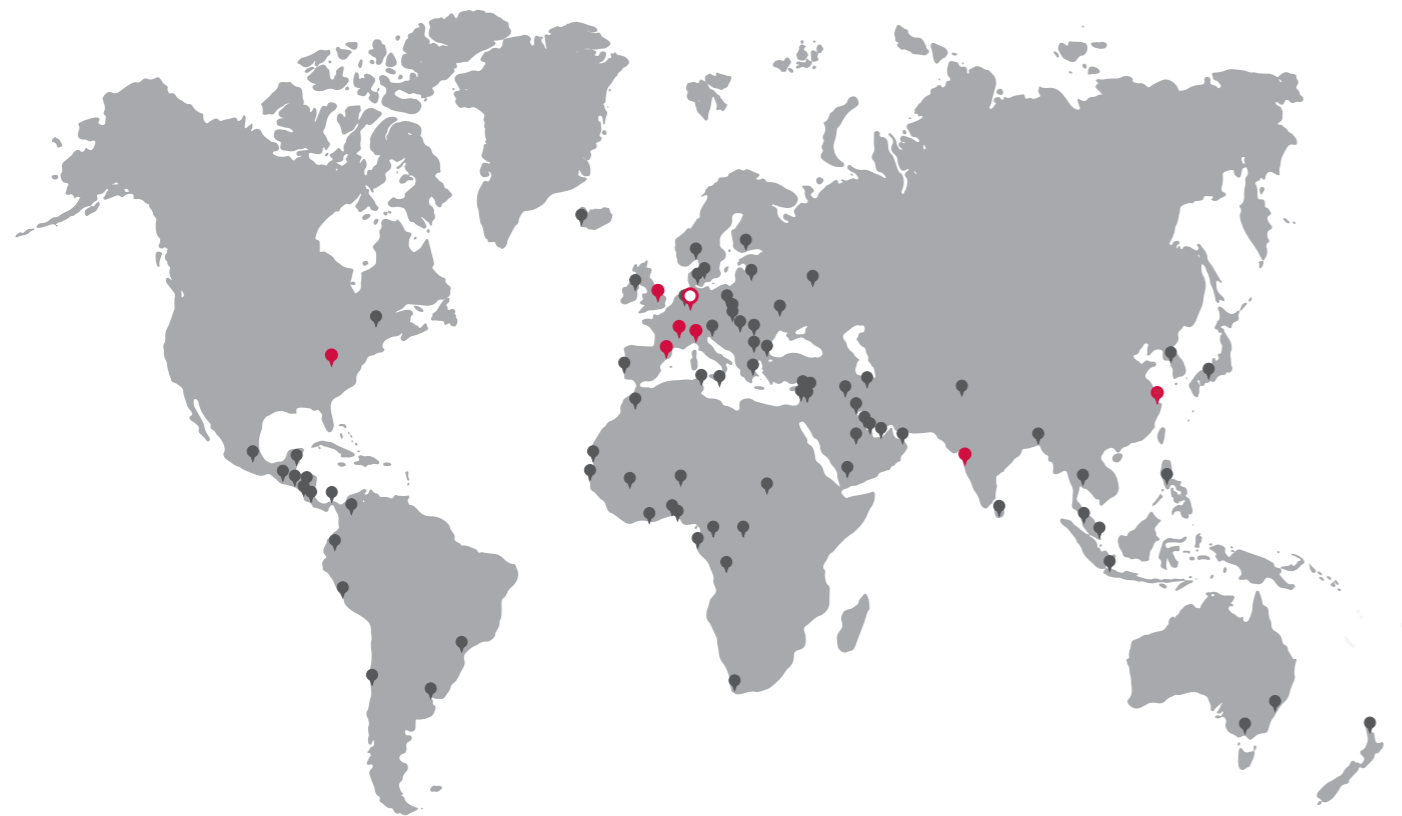
Baumer hhs, headquartered in Krefeld, Germany, is your world-wide partner for reliable and innovative glue application and quality assurance systems.

For us, quality and precision are basic principles of engineering and manufacturing, and professional services are an integral part of our products. We maintain a constructive and collaborative dialogue with our customers and suppliers, which forms the basis for solutions that optimally meet their individual needs.

Our trained sales staff and technicians support you with any issues you encounter in production. The Baumer hhs solution centre in Krefeld offers you assistance with new applications and in selecting the right adhesives.

We want our customers to be excited – with our premium products and our impeccable all-round service. But it's best to see our products for yourself! Just call or send us an e-mail.

We'd be happy to help you with your next project!



**hhs**  
Baumer Group

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Print product  
ClimatePartner.com/10767-2102-1003

dot board-E14-0221 - Subject to alteration. Printed in Germany.

# dot board / dot box

**hhs**  
Baumer Group

PLC connection for easy integration.  
The smart way to cut adhesive costs, CO2 emissions and increase sustainability.



**dot board**  
**dot box**

Let's stick together



baumerhhs.com

# Switch to applying dots. Saving on adhesive made easy.

Show customers that sustainability is more than just a buzzword by dotting from Baumer hhs. Dramatically reduce adhesive consumption and the associated CO2 emission without compromising glued bonds.

## Overview

The dot board amplifier card is used as the interface between a PLC and up to 4 Baumer hhs application heads. The dot board converts the original 24VDC signal for a glue bead into a programmed dot pattern reducing dispensed adhesive. The size of the dots and the distance between them are variable settings that can be entered in the operating software.

## Easily Integrated

The dot board can be directly connected to the Xmelt melter to control the application heads. Application parameters are entered via an integrated PC interface. There is an optional stand alone touchscreen that can be used to program the dot board.

## Your added value

Gluing is an essential part of your packaging process. Securely closed packages protect your products. By adding dotting, you not only save adhesive, but you also increase your products value by decreasing adhesive, downtime and waste. Dots of adhesive provide uniform heat distribution for better bonds and reduced clean up by virtually eliminating squeeze out. Dotting provides real value for today's packaging applications.



Dot board with operating unit

## Technical data: dot board

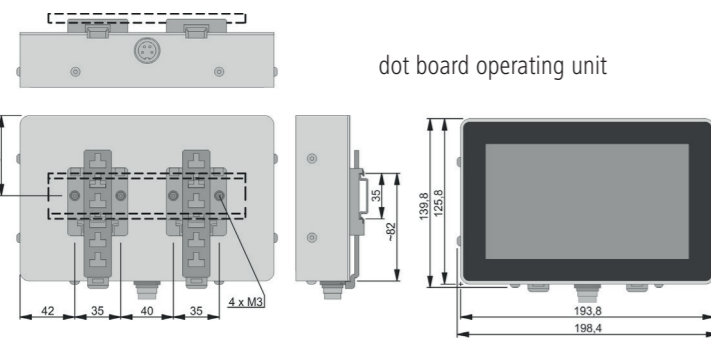
Data	Value	Unit
<b>Operating voltages</b>		
Voltage	24 ± 10 %	V <sub>DC</sub>
Current consumption, maximum	0,8	A
Power consumption, maximum	20	W
Electronic protection (automatic reset after fault resolution) in the permissible temperature range 0 – 40°C ±5%		
<b>Valve voltage</b>		
Valve voltage	54	V <sub>DC</sub>
Current consumption (< 5 ms), maximum	10	A
Current consumption continuous valve operation (depending on the valve)	4	A
Power consumption, maximum	120	W

## Technical data

Data	Value	Unit
<b>Inputs</b>		
ENC (encoder) A and B	24 ± 10 %	V <sub>DC</sub>
START 1 and 2	24 ± 10 %	V <sub>DC</sub>
START 3 and 4	24 ± 10 %	V <sub>DC</sub>
RESET	24 ± 10 %	V <sub>DC</sub>
TEST	24 ± 10 %	V <sub>DC</sub>
Coils 1 – 4, type N-switching to GND 24 V DC PLC	0 – 5	V <sub>DC</sub>
PWR ON (Power on)	24	V <sub>DC</sub>
<b>Outputs</b>		
Valve outlets (voltage depending on the supply voltage)	4	
READY, optocoupler type, maximum	24	V <sub>DC</sub>
	10	mA
ALARM, Type PNP, maximum	500	mA
OUT1	500	mA

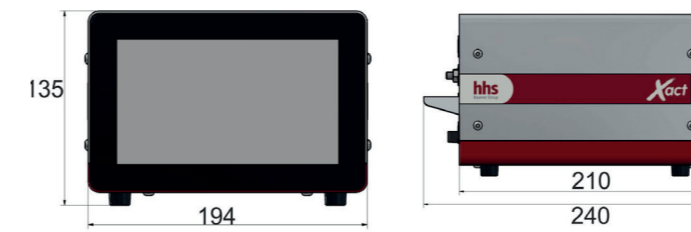
## Weight

Data	Value	Unit
dot board	240	g
dot board operating unit	1280	g



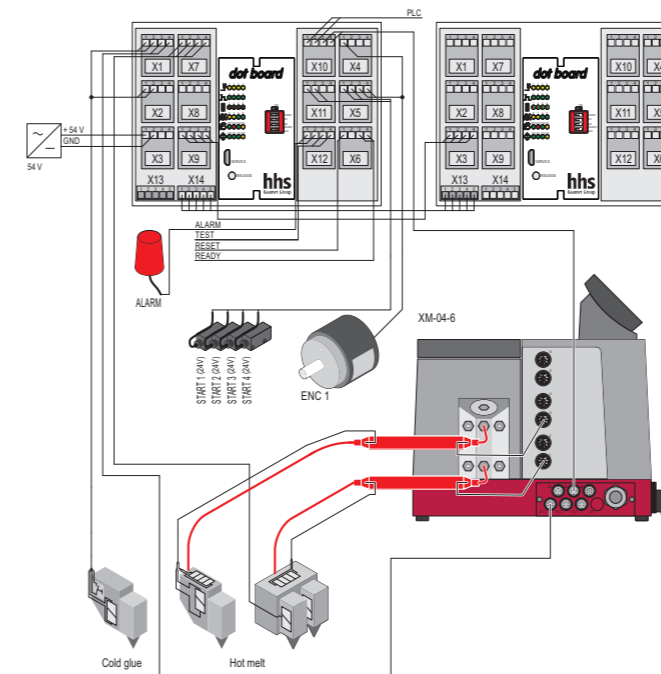
dot board operating unit

- Less adhesive on every carton
- Reduced CO2 emissions
- Minimizes downtime due to cleaning
- Better sealed packages
- Simple to install

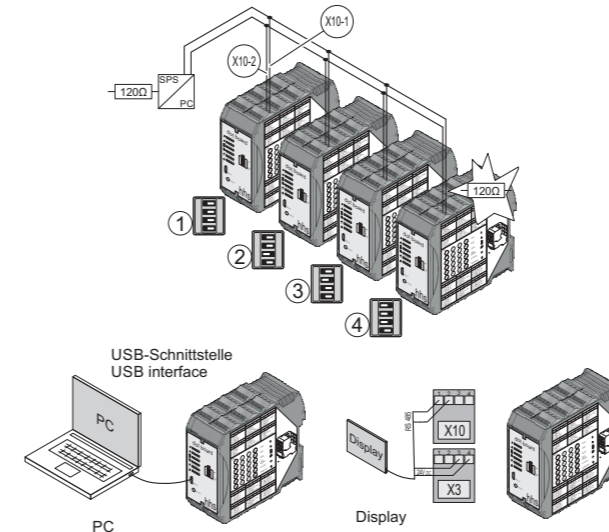


dot box

## Technical integration: dot board



RS 485-Schnittstelle für bis zu 4 DBE04  
RS 485 interface for up to 4 DBE04



Dotting minimizes CO2 emissions and saves money



## Flexibility

The Baumer hhs dot box is the perfect solution for all machine environments that do not permit integration directly in the control cabinet. This compact controller offers the same functions and is simple to operate. Reducing glue consumption on every packaging line has never been easier.

## Technical data: dot box

Data	Value	Unit
<b>Supply data, electrical</b>		
Supply voltage, 1 NPE	115 ± 10 % 230 ± 10 %	V <sub>AC</sub> V <sub>AC</sub>
Frequency, maximum	50/60	Hz
Control voltage, signals	24	V <sub>DC</sub>
Control voltage, application heads	48	V <sub>DC</sub>
Current consumption at 115 VAC	3	A
Current consumption at 230 VAC	1,5	A
Fuse	3,15	A
Protection class, mains connection	IP32	–
Current consumption (< 5 ms), maximum	10	A
Current consumption continuous valve operation (depending on the valve)	4	A
Power consumption, maximum	120	W

## Technical data

Data	Value	Unit
<b>Inputs</b>		
ENC (encoder) A and B	24 ± 10 %	V <sub>DC</sub>
START 1 and 2	24 ± 10 %	V <sub>DC</sub>
START 3 and 4	24 ± 10 %	V <sub>DC</sub>
RESET	24 ± 10 %	V <sub>DC</sub>
TEST	24 ± 10 %	V <sub>DC</sub>
Coils 1 – 4, type N-switching to GND 24 V DC PLC	0 – 5	V <sub>DC</sub>
RS485 interface	–	–
<b>Outputs</b>		
Valve outlets (voltage depending on the supply voltage)	4	
ALARM, Type PNP, maximum	500	mA
OUT1	500	mA

## Weight

Data	Value	Unit
dot box	4002	g